

*New York
to Brest
in Seven Hours*



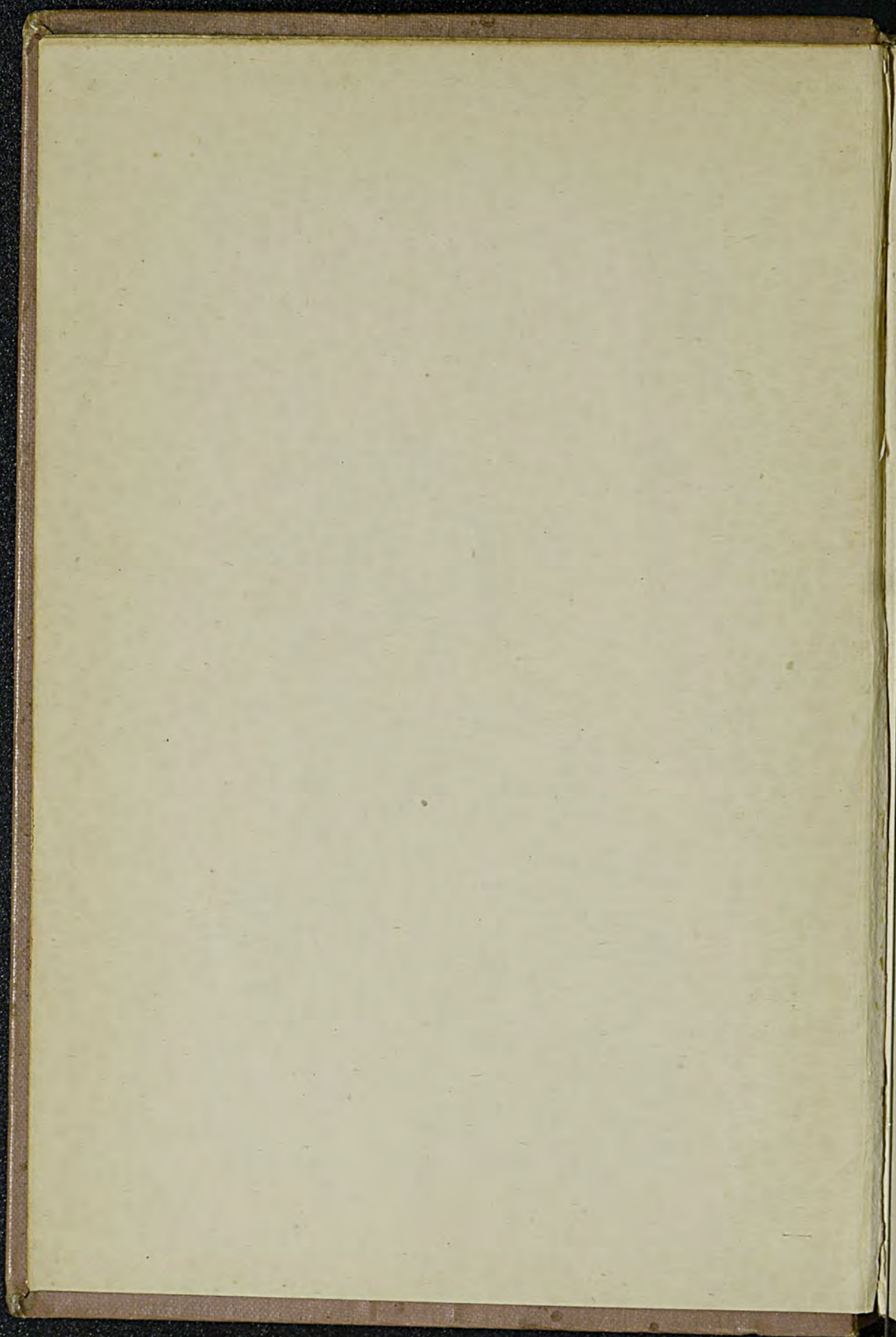
No. *V* 100 *
Handle me gently,
Read me lightly,
Return me presently
To *Dr. J. C. F.*
Tottenham Mechanics' Institute.

No. _____ *

Handle me gently,
Read me intently,
Return me promptly

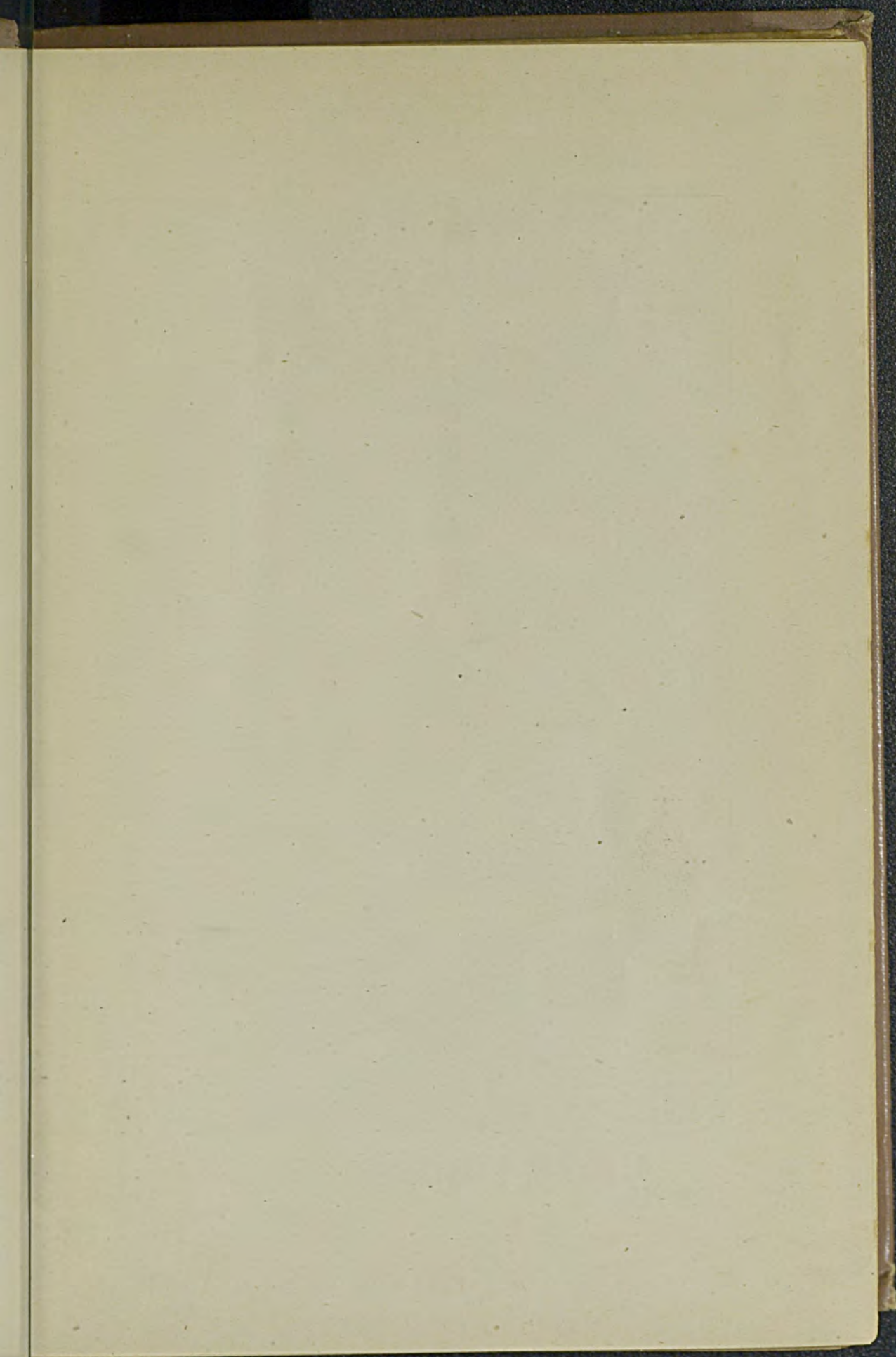
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NEW YORK TO BREST IN
SEVEN HOURS.

LONDON:
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ST. JOHN'S HOUSE, CLERKENWELL ROAD, E.C.





Frontispiece.

He opened his book and began to read.

Page 265.

NEW YORK TO BREST IN SEVEN HOURS

BY

ANDRÉ LAURIE

AUTHOR OF "THE CONQUEST OF THE MOON," ETC.

FULLY ILLUSTRATED

LONDON :

SAMPSON LOW, MARSTON, SEARLE, & RIVINGTON

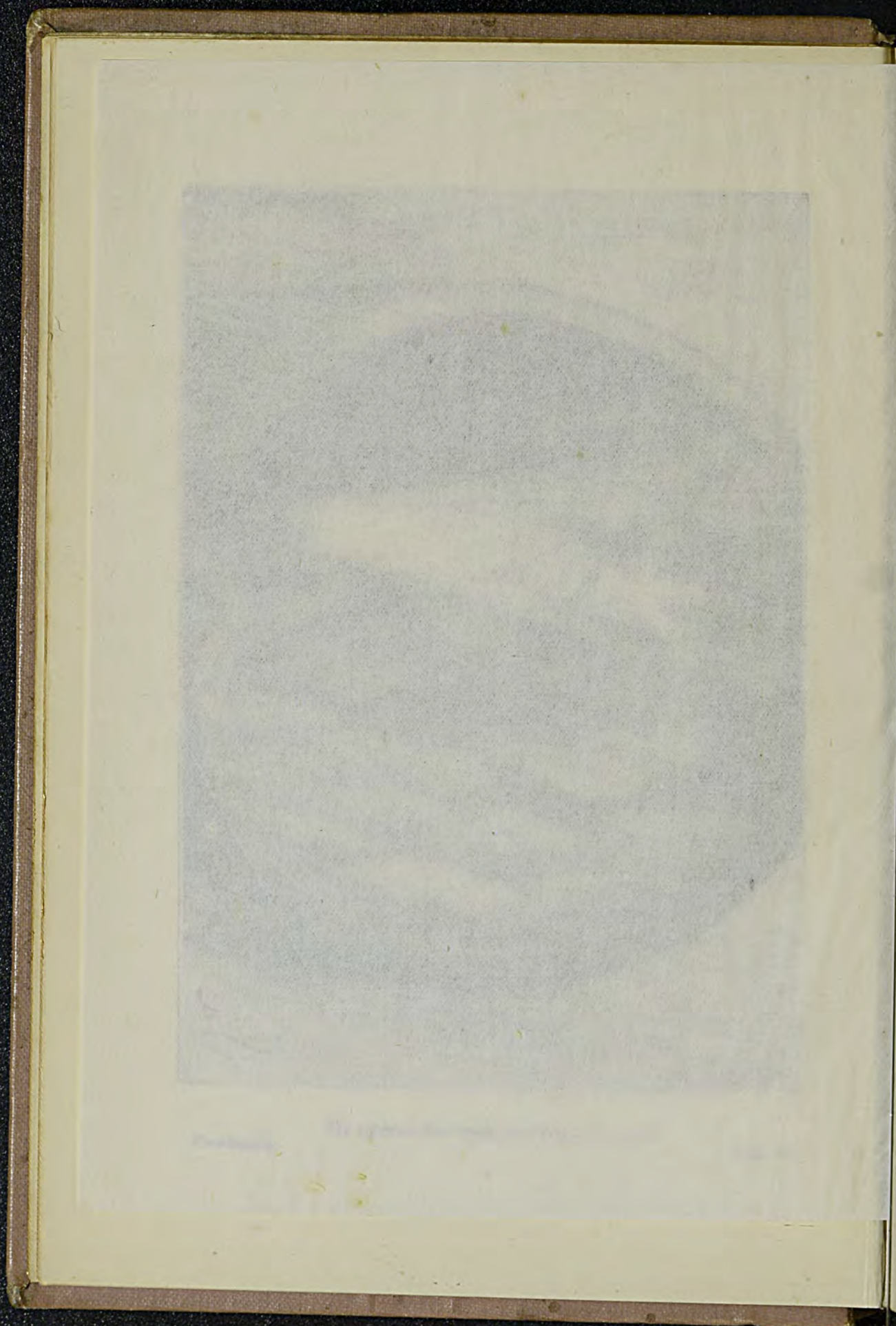
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St. Dunstons House

FETTER LANE, FLEET STREET, E.C.

1890

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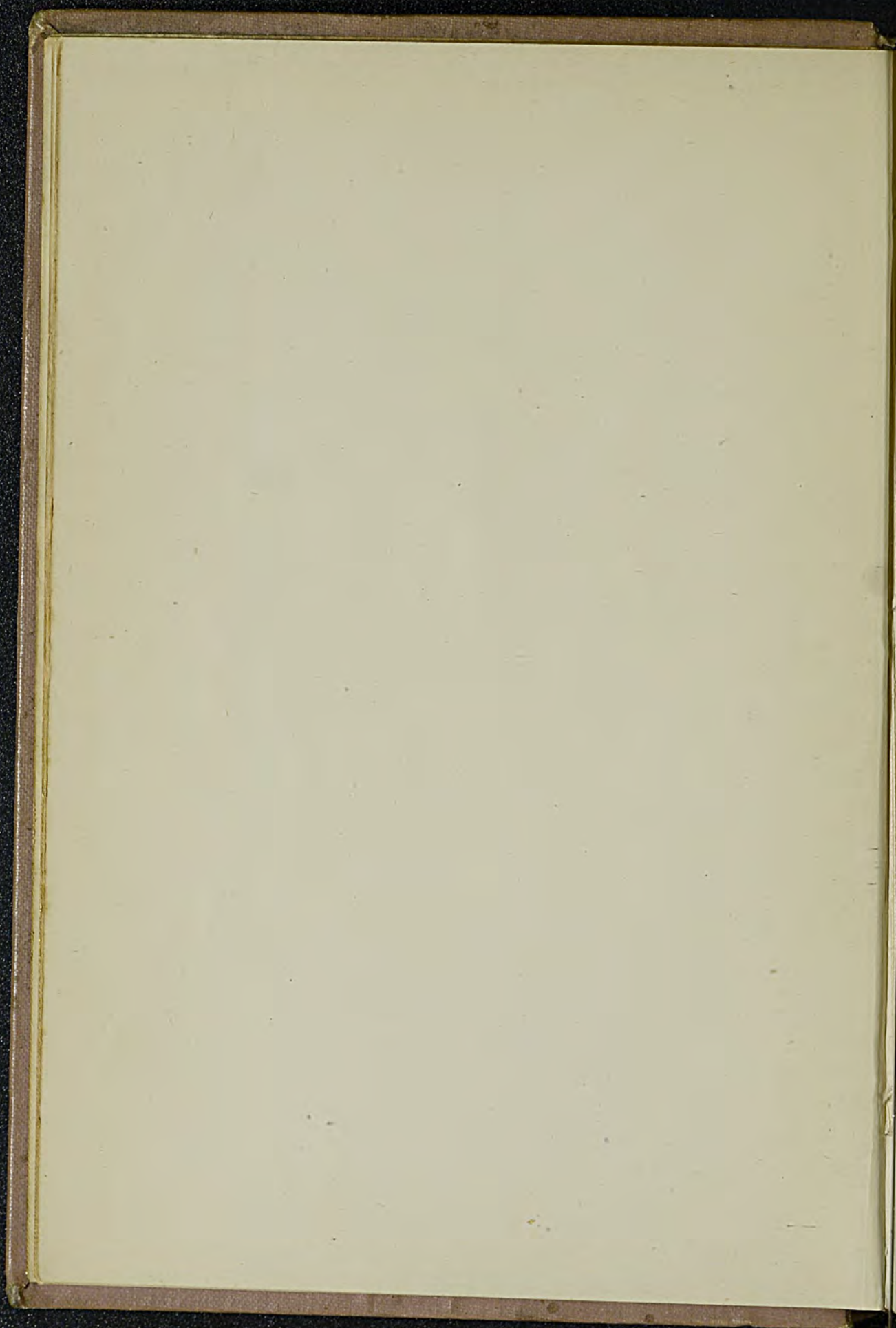
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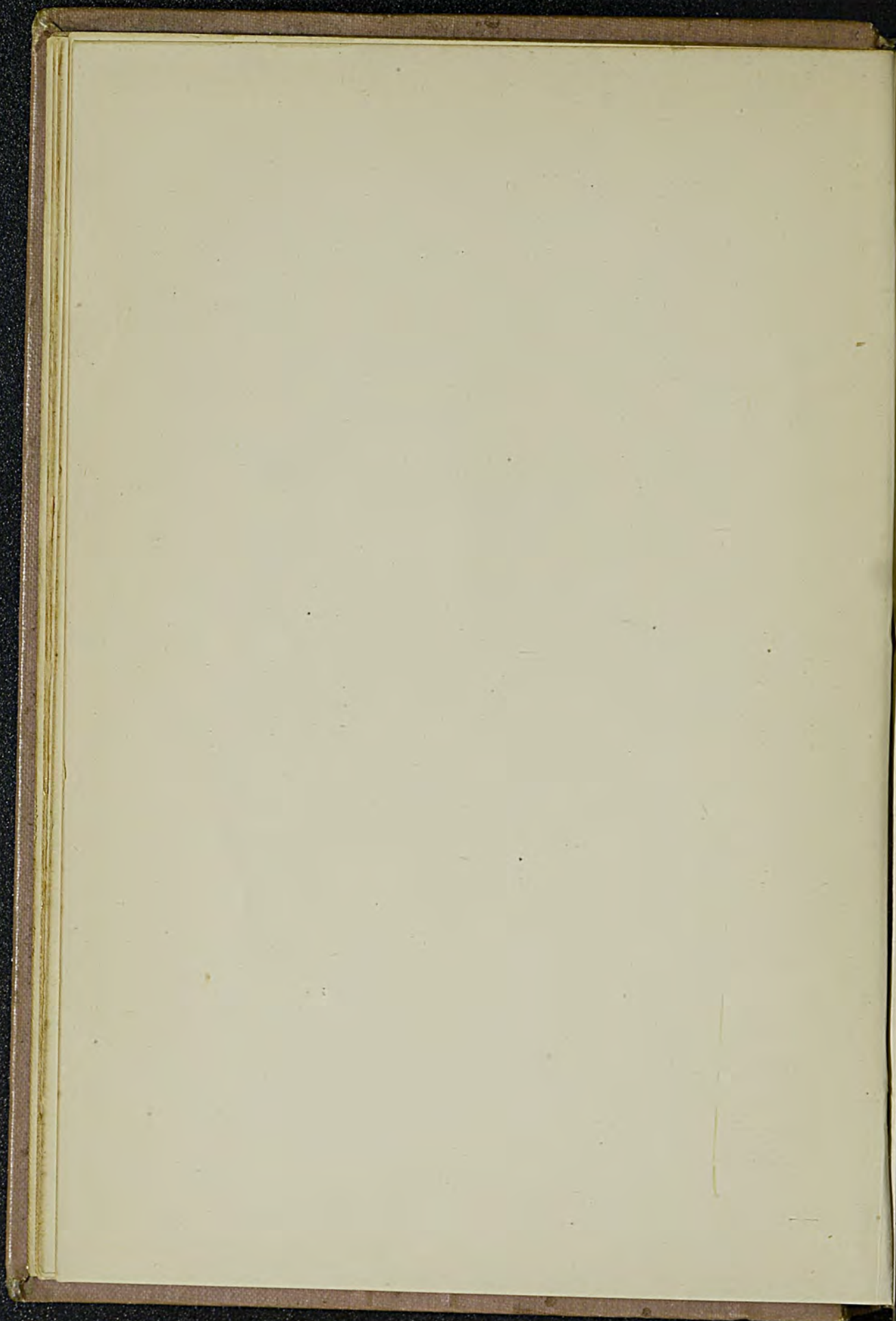
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NEW YORK TO BREST IN SEVEN HOURS.



CHAPTER I.

A STRANGE DWELLING.

"CASSOULET?"

"Mr. Raymond?"

"You are sure you saw one of those cursed spies glide among the reeds while I was showing Ebenezer Curtiss the way in which I veered out my tube?"

"Sure is not the word. But the plants shook suspiciously on the right bank, and it seemed to me that I saw something like a man's head between two tufts of reeds."

"Why did you not tell me so at once? We should have put the cap on that head and verified the civil status of its proprietor—"

"You were just then explaining to Mr. Curtiss the way

in which you hung your floats, and I did not dare to interrupt you."

"In principle your thoughtfulness is worthy of praise, Cassoulet. And it is especially praiseworthy owing to your not having yet habituated yourself to such reserve. You are certainly shaping, my boy, and I shall finish by making a gentleman of you! But in this instance you should have warned me!—"

"So I said to myself when it was too late, Mr. Raymond; and when I was going to beckon to you, the head had disappeared. Perhaps after all it was only a stone or a stump."

"Hum! We must not trust to that! The Drill Pit folks are wideawake and may already suspect a snake in the grass. Ebenezer Curtiss interests them remarkably. His least movements are watched, you may be sure of it. And that is why we had better use the lake as the scene of our experiments, instead of continuing them in the river."

"Yes, but then it may happen that you will lose your tube, as you did the first time, and we shall be five or six hours finding it under the water."

Raymond Frézols took no notice of this objection, but silently leaning over his little white desk resumed his lines of ciphers and algebraic formulæ. He was a tall young man of about twenty, attired, like most of the working-

men in North America, in a white shirt and cotton trousers tucked at the knee into a pair of large boots ; but in spite of this eminently Yankee costume, no one would have taken the wearer for an Anglo-Saxon. His graceful, supple figure, his short chestnut hair, his clear eyes, and the fine moustache shading his energetic mouth, proclaimed him a Frenchman from head to heel, in character and appearance, as well as in language.

As to Cassoulet, he was a little fellow, no bigger than your hand, with an old-fashioned face showing much shrewdness, the physiognomy resembling that of those dark-eyed, smooth terriers who trot about the legs of stablemen. You would have taken him for nine, but he was fifteen. He also wore the inevitable white shirt and cotton trousers ; but, to judge from his appearance, his financial resources did not permit of the purchase of a pair of boots, and so he contented himself with heavy nailed shoes.

The apartment in which the conversation took place was an old coach, with a yellow body, transformed for the present into a travelling telegraph-office, as shown by the shelf with the Morse apparatus and receiver, and two telegraph lines fixed to the ceiling on porcelain insulators.

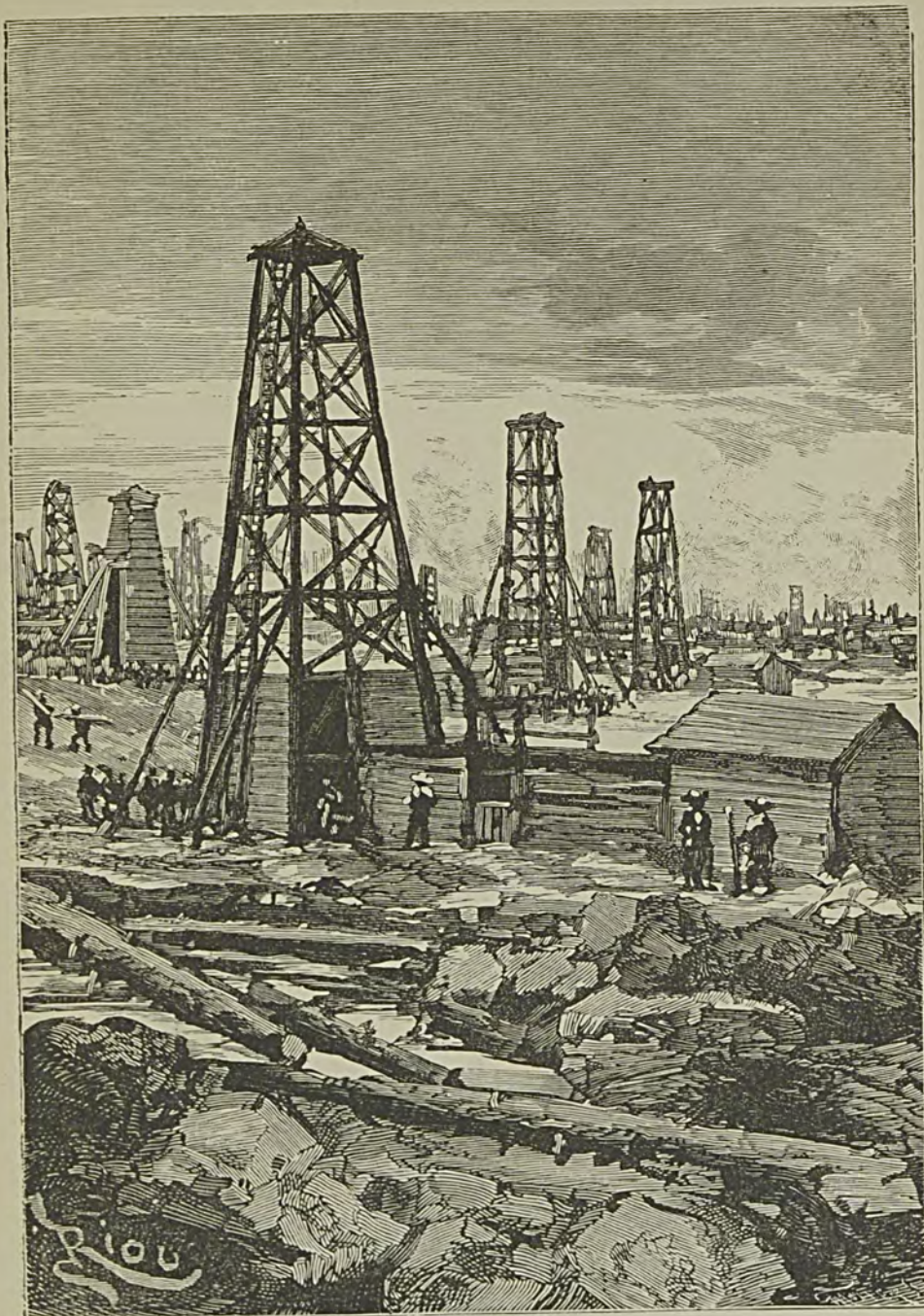
The front of the coach had been ingeniously converted into a bedroom, and was occupied by two beds formed of a strip of strong canvas nailed to a frame. Two stools, a portable stove, a large iron basin, and a very

small number of cooking utensils, completed, with five or six shelves of books, the furniture of this house on wheels.

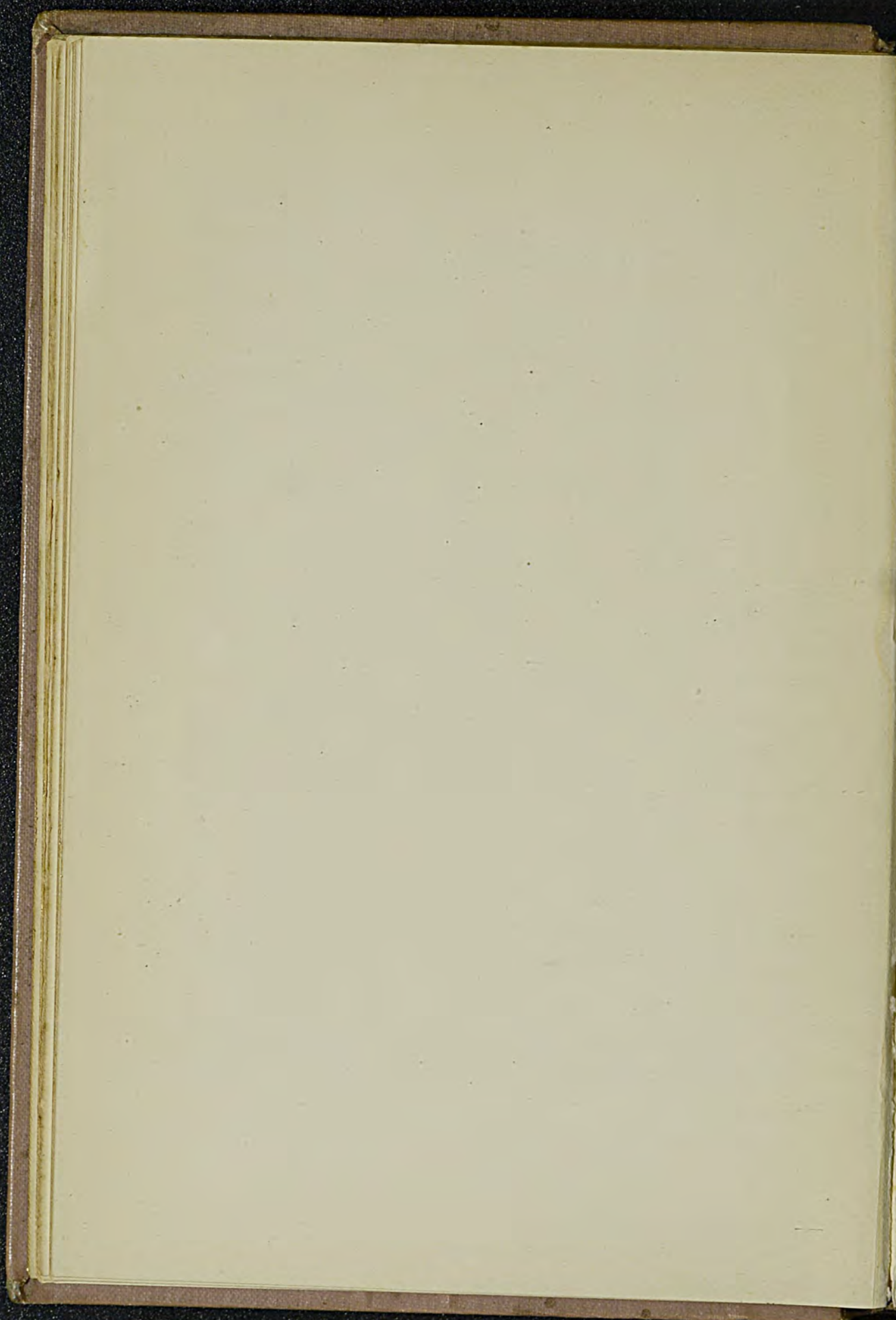
One of the windows had been transformed into a wicket for communication between the two telegraphists and the public. The other openings remained with their sliding windows, through which could be seen a strange devastated landscape, an uncultivated plain which had not long since been a forest, of which there remained but a few fallen trunks among the huts of wood and galvanized iron grouped at long intervals around one of those high scaffoldings which in America are called derricks, and are used for boring petroleum wells.

These derricks lay to the right and left, to the north and south and east as far as could be seen ; all were of the same size, and had at their base a shed in which a steam-engine was at work ; and all raised their open timbering to the sky to a height of from twenty-five to thirty meters. To the west the derricks disappeared to make room for long lines of wooden houses dominated by a few more pretentious constructions in brick and stucco—such as hotels, general shops, and drinking saloons.

These streets, these huts, these hotels, these shops and saloons, were nothing else than Drill Pit, one of those sudden towns which the petroleum fever causes to spring up like mushrooms on the soil of Pennsylvania, immediately



These derricks lay to the right and left.



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a new deposit of mineral oil is discovered, and which often disappear quite as quickly without even giving the geographers time to put them on the map. Drill Pit already had thirty thousand inhabitants; it was proud to possess ten schools, an exchange, public fountains, a library, three iron bridges, and a mile and a quarter of wharves on Yellow River, a picturesque stream that flowed not far off into Lake Erie.

While Raymond Frézols went on with his figures, Cassoulet had threaded a needle and set to work to mend an old vest, which he did very cleverly. But doubtless this manual labour did not give sufficient food for his imagination, for the silence seemed to weigh on him, and from time to time he threw a glance at his companion.

"Mr. Raymond," said he, all of a sudden, "I should like to know one thing, if it would not inconvenience you to tell me."

"Speak. I have finished my calculation."

"Well, regarding these derricks which bore the wells in search of petroleum five or six hundred meters down, is it long since people began to build these machines?"

"Not very long, scarcely a quarter of a century."

"Ah! And what did they do before?"

"They did not know of the existence of the mineral oil, or, rather, they thought it was a rarity, and no one troubled about it from an industrial point of view."

"And who bored the first petroleum well?"

"A certain Drake—Colonel Drake, as he was called."

"An officer of the American army?"

"No. A grocer, and then a commercial traveller, and guard of a train, whose friends called him 'Colonel.' He ventured to bore the first petroleum well in Pennsylvania in 1858. He was more than a year at work on it, and did not reach the oil until 28th of August, 1859. That was a memorable date in the annals of human industry—a date of more importance, assuredly, than that of the greatest battles, but which very few people know, nevertheless."

"This Drake doubtless became immensely rich?"

"Far from it. He was ruined, like many other inventors. But Pennsylvania, where he had opened the first petroleum well, did not show herself so ungrateful. She voted him a pension of fifteen hundred dollars, with reversion to his widow, who still enjoys it."

"But how did Drake come to have an idea of sinking a well for petroleum, and why did he sink the well in Pennsylvania rather than elsewhere?"

"Because they had already noticed in this district the presence of the oil on the surface of the ground, and had found it often mixed with waters from the springs and with the products of the rock-salt pits. It is a curious thing that a Frenchman, an officer of Montcalm's, the commandant of Fort Duquesne, first mentioned pe-

troleum, in 1759, in a report to his general. He had seen the Seneca Indians on the bank of the Venango light the lamps for a religious ceremony which were filled with an oily substance they had collected on the surface of the river, and he noted the fact as a local curiosity. Nobody thought any more of it for more than a century. If it happened that the oily matter was found in the Alleghany salt-pits, it was looked upon as an inconvenience and not as an advantage. It was only in 1833 that Professor Stillmann, senior, of New York, directed his attention to this oil, which the inhabitants of a small village collected on the surface of the stream, and which they used as a remedy for all rheumatic troubles—"

Here the narrator was troubled with a sharp knock at the window. A hand deposited a telegraphic despatch. Raymond rapidly counted the words.

"Thirty cents," he said.

The invisible visitor paid the trifling sum and departed.

For a few minutes nothing more was heard in the old coach than the clicking of the Morse apparatus as it transmitted the message.

"Hallo!" exclaimed Cassoulet, who made out the meaning by the sound. "What! Johnson Pit struck oil? Mr. Curtiss ought to be pleased!"

And seeing Raymond had finished his transmission, he continued,—

"They used the oil for rheumatism, did they?"

"Yes. The remedy soon became popular in the United States. It was sold in bottles under the name of Seneca oil. A druggist of Pittsburg stated in 1849 that he could easily procure it from a salt-well worked by his father. A short time afterwards certain chemists began to distil shale oil. The attention of specialists became more and more directed to what began to be known as the rock oil of Pennsylvania. A company was formed in 1855 to seek for this oil in the neighbourhood of Titusville, where several places where it oozed from the ground indicated its presence in the subsoil. The efforts of this company produced no practical results; but Drake, one of its most active members, thought he could succeed better a few years later, and to him belongs the honour of being the first to sink a petroleum well."

"Did the well yield too much?" asked Cassoulet, greatly interested in these details.

"Very little, on the contrary; a thousand litres a day. But petroleum was then relatively dear, two or three francs the gallon of eight litres, if I am not mistaken. It was thus quite a treasure that Drake had discovered; and the news made a tremendous sensation in the country. From all points of the compass came the capitalists to speculate on the petroliferous ground. Lots despised the day before now sold for thousands of dollars. Prosperous farmers

gave up the culture of their fields to prospect for petroleum. As there always is, there was much disappointment and ruin, but success crowned the efforts of a certain number of the speculators and a colossal industry arose. In the year 1862, Pennsylvania exported fifty million litres of petroleum, worth, at the least, from seven to eight millions of francs ; at present it exports four thousand millions of litres, worth two or three hundred millions of francs !”

“It seems to me that it might have showed itself more generous to Drake and his widow !” said Cassoulet. “But is there no petroleum but in Pennsylvania ?”

“Very likely mineral oil exists elsewhere, but it has not yet been discovered, though there is nothing surprising about that, considering that it is found at a mean depth of five or six hundred meters, about ten times the height of the towers of Notre-Dame. The only places where natural reservoirs of petroleum are actually known and worked are Pennsylvania and the northern border of the State of New York, the region of Baku on the Caspian Sea—”

“In America ?”

“No, Cassoulet ; the Caspian Sea is not in America, but in Asia, and you ought to know it ! For attempting to puzzle me with such fantastic questions you will remain silent for an hour and learn by heart in your geography the chapter on Asia.”

Cassoulet made a grimace which might have passed for

a smile, and taking his book, he set docilely to work on the study of Asia, while Raymond returned to his calculations.

But at the end of half an hour the little fellow doubtless thought that his geographical education had been sufficiently advanced for the day. More imperative duties needed his attention. He left his books, lighted the fire, and began to peel, as if he were an accomplished cook, the potatoes, which he threw into a saucepan full of water.

"You are already thinking of dinner?" asked Raymond, lifting his eyes.

"Time is getting on," said Cassoulet sententiously, "and I confess that our excursion on the river has given me an appetite."

This allusion recalled the young man's thoughts to the incident that had been related by his little comrade, for he continued,—

"We must clear up that spy mystery. To-morrow do not fail to watch carefully for anything suspicious and let me know at once."

"Yes, certainly," said Cassoulet. "But the difficulty will be to nail the spy, or rather to see him, if we are on the water and he is on the river bank!"

"Quite so. There would be more chance of taking him by surprise on the side where he is not expecting us. You can remain on land and follow the steam launch

while I go down the stream. If I see the man, I will steer for him, and when he takes to his heels you can catch him on the road—"

"That will be great fun, particularly if you show me the direction he is taking."

"You can rest assured I will do so. And," added Raymond, with a smile, "to make more sure I will signal to you in the Morse language."

"I don't know that language," said Cassoulet innocently.

"You know it very well, on the contrary, as you showed me just now in translating from the sound of the instrument the message I was sending. To-morrow I will talk to you in the same language of dots and dashes as we use in telegraphy. The only difference will be that instead of using the instrument I will use the steam whistle—"

"And you think I shall understand?"

"I am sure, considering that your ear is already accustomed to the alphabet. What do you say to this?" said Raymond, whistling with his lips a series of longs and shorts, doing duty for dashes and dots.

"To the right!" said Cassoulet without the least hesitation.

"And this?"

"To the left."

"And this?"

"He is making towards you!"

"Right! You see you have not the least difficulty in translating my whistled message. Well, the articulation will be much clearer with the breath of the steam-engine. So be ready to-morrow to follow its indications."

CHAPTER II.

THE PETROLEUM KING.

NEXT morning, shortly before nine o'clock, Raymond and Cassoulet locked the door of their telegraph-office, and hung up a notice informing the public that they would return at noon, and they then walked off towards the wharf on Yellow River.

A screw launch, the *Topsy-Turvy*, was waiting for them with steam up. In the stern of the launch sat a man of from forty-eight to fifty years old, with grey hair, pleasant features, blue eyes, and a tuft on the chin. He was chewing a toothpick.

"Come on!" said he, when he saw them; "I have been here kicking my heels for the last five minutes—"

"That is because you were before your time, Mr. Curtiss," said Raymond Frézols quietly, and looking at his watch. "Nine o'clock has not yet struck."

Ebenezer Curtiss was the richest man in Drill Pit—what is called in Pennsylvania a petroleum king, that is to say one of those sinkers of wells who drag from the entrails

of the earth dollars in millions. Consequently, he had a very good opinion of himself—too good an opinion, said the people. His fault was his imperturbable vanity. He had become puffed up like a huge frog, owing chiefly to his not considering that his fortune was due more to a lucky hit than to his merits. It was enough for him to have an opinion, for that opinion to become an article of faith with him; but at the same time he was not a bad fellow, and he was very kind-hearted, and really competent in the technical details of his trade.

Accustomed to see all the world bow before his millions, he was rather taken aback at the calm dignity of Raymond Frézols, whom he had known but a few days. At first he was astounded at the reply, but after a moment's reflection he began to laugh.

"Well, I am in the wrong, of course," said he cheerfully, as if he were confessing a crime. "You must forgive my impatience; I was in a hurry to see your new floats—"

"Here they are," said the Frenchman, showing a leather bag he carried in his hand. "I am not sure we ought to try them to-day. Cassoulet noticed yesterday that we were followed and watched. It will, perhaps, be wiser to devote the morning to another matter."

And in a few words Raymond explained his plan of campaign.

"That is a capital idea!" said Ebenezer Curtiss. "I should have been much surprised if we had not been watched. All Drill Pit would stew with envy if they only knew what we are up to on this river. I would swear that Timothy Campbell would never sleep again."

"If you think so, we will leave Cassoulet on shore. He will follow the right bank while we run down stream. If we notice anything suspicious we can signal to him."

Matters being thus arranged, Raymond took the helm and told the engineer to start. The screw at once began to work. The *Topsy-Turvy* steered for the middle of the river and remained there on her way as long as she was in sight of the town: then she gradually approached the right bank and ran along gently by its side.

As she went the conversation continued.

"Timothy Campbell has a grudge against you, then?" asked Raymond. "Why?"

"Why has Timothy a grudge against me?" replied Ebenezer. "Oh! that is very simple. He has constantly failed while I have succeeded. When I came to Drill Pit six years ago, Timothy had spent ten thousand dollars in boring successively three wells without any result. By pure chance I bought a lot next to his. I began to sink Williams Well, which is so famous just now, and in three months I struck oil. My well yielded eight hundred barrels a day. That was the first cause of Timothy's anger. My

well was the talk of the country, all my neighbours began to dig round my claim so as to share in the cake. That they had a right to do: there is nothing to say against that. Some struck the oil; others went down outside the deposit; some obtained twenty, thirty, a hundred barrels a day, others got none. Timothy, I think, got about fifty. On the other hand, my yield began to fail. Then I did what is customary in such cases: I had recourse to explosives. A torpedo of nitro-glycerine was sent down my well, it was shot there, broke away some of the obstacles, and stimulated the productive power so, by the compression of the gas, that my derrick became a regular oil gusher. That was within my right; no one could say anything against me. But it happened my neighbours' wells ran dry, especially Timothy's. That was the second cause of his hatred.

"A few months later I took up some ground some distance from Drill Pit, in a then unexplored place, and drove down what we call a wild-cat, a random shoot if you like, in which you set the cost of boring against the chance of falling on a fortune. I had good reasons for doing so, and my movements were watched. An army of spies prowled about me day and night watching the sand that came up, and cross-examining the workmen as to the chance of a favourable result. The Pittsburg exchange and the New York exchange dried up, so to speak, at the

news of my boring. Nothing could have been easier than to spread false news and deceive the scoundrels. In my place Timothy Campbell would not have been so quiet, but I did not even think of doing so. It is not my disposition. I contented myself with narrowly watching my derrick and keeping off all those who came near it. It became known as the '433 Mystery,' that being the number of my lot on the map.

"One evening in March, it was the twenty-second, I remember it as if it were to-day, I began to feel a little discouraged. We had gone down seven hundred yards, we had passed the fourth sand and nothing had happened. I had said to the foreman, 'If we go on like this for two or three more days I shall give up.' In the morning there was a rise in the oil market, and I was certain the rise was due to some considerable purchases by Timothy, his reason being a report he had had from one of his spies, a report based on the words I had let fall, and, as I knew later on, a sample of my fourth sand he had obtained for its weight in gold.

"Timothy was at the bottom of it. What happened? On the 26th, at four o'clock in the afternoon, we touched the oil, and not a little pocket of oil, if you please! It was Strawberry Grove, which you know well, and which began by giving five thousand barrels a day, while its neighbours altogether were only giving thirty-five thousand.

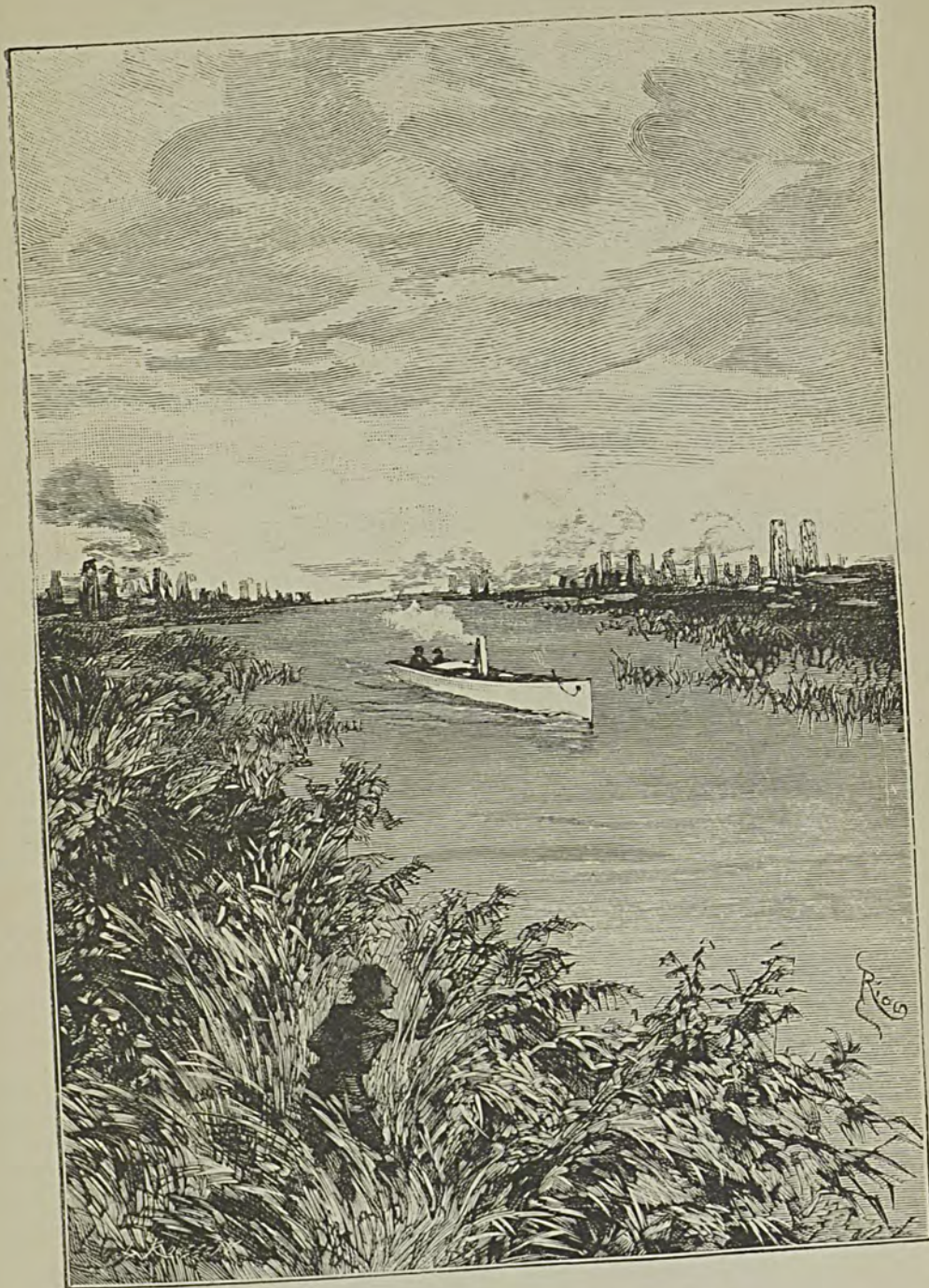
You can judge of the fall in the market and the drop that Timothy went down. Beaten completely, ruined, without resources, he was positively reduced to beggary. I assure you I was as sorry for him as I was innocent. It was not my fault if the unhappy man thought to spy on me and make a profit out of the orders he had bought so dearly. In his eyes I was the sole author of his misfortune. He considered that I had stolen his part of the luck of the world, and saw between us a kind of curious battle in which my prosperity was the direct cause of his failure. Sooner or later, he said to those who would listen to him, destiny would make things equal by ruining me while it made his fortune. And, doubtless in order to help on destiny a little, he continues to spy on me, to follow me about, and observe my slightest movements. Up to now his plans have not succeeded ; but no matter. He—"

Suddenly Ebenezer Curtiss interrupted himself to say,—

"Do you see those plants on the bank? They are shaking as if at the passage of some large animal."

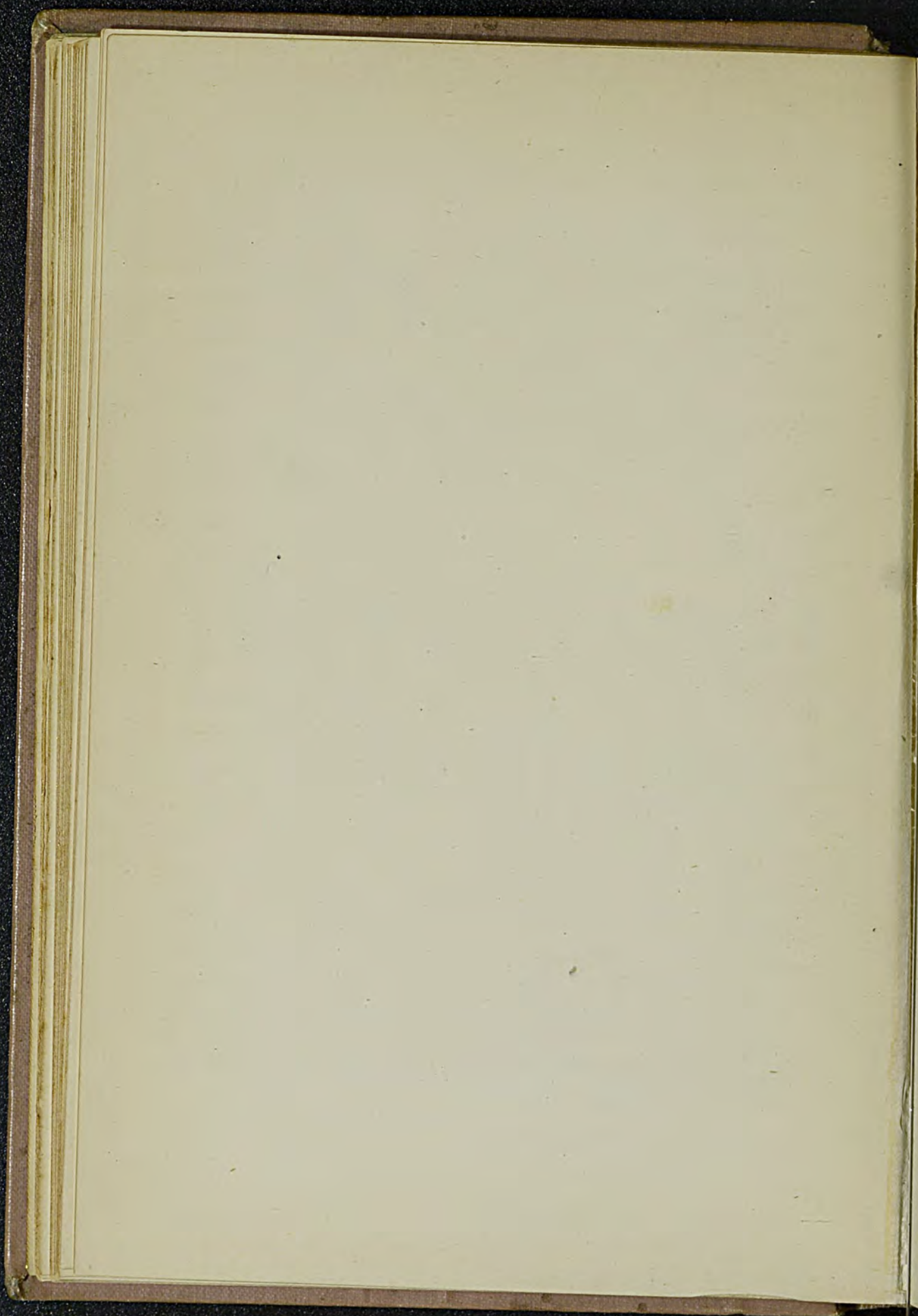
Raymond glanced at the place indicated by the petroleum king, and saw the tall plants bend and spring back again along a sort of footpath that was immediately effaced and seemed to end at a clump of trees on the bank of the river. Instantly he slowed down the speed of the launch, and whispered,—

"We had better pretend to be sounding, and approach



"Do you see those plants on the bank?"

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the bank gradually ; but, without appearing to do so, keep your eye on what is happening."

The manoeuvre was successful. In less than five minutes Raymond, with his head bent over the stern pretending to watch the lead he was hauling in, saw between two roots of a tree, almost at the water level, a pair of eyes fixed on his movements. Without a word he went close to the engineer, and putting his hand on the steam-whistle gave, in a series of longs and shorts which might have been heard a couple of miles away,—

"Some one is there. Look out!"

Then returning to the helm, he headed the launch straight for the pair of eyes. Immediately the eyes disappeared, there was a scuffling among the shrubs, and a human form glided between the trees. As Raymond's object was to make the spy discover himself, he shouted out,—

"Hallo! Mr. Inquisitive, where are you off to?"

The result of this interpellation was to hurry up the fugitive considerably. He was seen to dive among the underwood, where his presence was revealed by the waving of the branches. Probably he thought he was out of reach, for he hardly tried to hide himself. But he did not reckon on the steam-whistle, which resumed its strident indications in the Morse tongue.

"He is running towards my right in the direction of

Drill Pit. Cut him off. We will land and follow him."

The message ended just as the bow of the launch struck against a stump, on to which Raymond jumped.

"Do as I do, and run to the right!" said he to Ebenezer, making off on the other side.

The fugitive would thus be caught in a triangle, of which Cassoulet would form the vertex if he had followed instructions.

A chase so cleverly arranged could not last long. The fugitive had not gone three hundred yards before he saw Cassoulet, and immediately he turned off to the left.

This was to fall into the hands of Raymond, and so he soon turned again to the left, but there the tall figure of Ebenezer barred the way.

The man was caught in a trap. Suddenly they saw him stop and hide himself in the thicket.

In a few seconds Raymond was standing over him.

"You rascal," he said, taking him by the collar. "You have been spying on me for the last two days! What do you want? Do you want a lesson? I will give you one in a minute!"

The man said not a word. He allowed himself to be shaken like an old rag, and seemed to be in so unlikely a state to oppose the least resistance that Raymond suddenly

relented and let him go, to look at him with surprise and disdain.

He was a poor wretch, with a wandering, ludicrous look, small, thin, miserably clothed. Pale light hair, smooth cheeks, and little eyes edged with red made him look like a white rabbit, and seemed to show he was an albino. He remained sitting sheepishly just where he had been knocked down, twirling a shabby straw hat in his dirty hands, and either from confusion or stupidity appeared incapable of speech.

Cassoulet on one side and Ebenezer on the other now came up and attacked the prisoner.

"Ah! my son!" said Cassoulet in peals of laughter at the end of this man-chase. "So it's you that poke your nose into other people's business?"

"Scoundrel!" said Ebenezer, red with anger and puffing after his run. "Who paid you to watch me? Was it Timothy Campbell?"

The name appeared to awake a ray of interest in the expressionless eye of the albino. He moved his lips, and repeated in a half-whisper as if to himself,—

"Timothy Campbell!"

Then he remained silent for seven or eight minutes under the avalanche of questions and insults with which Ebenezer Curtiss overwhelmed him. Then he suddenly repeated a dozen times over, after the other, just like a parrot,—

"Peter Murphy! Peter Murphy! Peter Murphy! Peter Murphy!"

"He is playing the fool," said the petroleum king; "but if he thinks to deceive us he is mistaken."

"I am rather inclined to think he is an idiot," said Raymond. "Look at his dull eyes and his stupid face. There, that will do!" he said to the poor creature, who continued the repetition of the name. "Yes, Peter Murphy, we understand. But tell us what you want with us, and why you were playing the spy on us."

"Peter Murphy, not bad! Peter Murphy, good boy! Peter Murphy, take a walk!" said the other all in the same tone.

"He walks on his stomach, like a lizard," said Cassoulet.

"On his stomach like a lizard?" said the man, as if he were quite stupefied.

"But you speak French?" said Raymond, struck with the circumstance. "Then why this name of Peter Murphy? Is it yours?"

"Don't know," said the other. "Not fault of Peter Murphy if he speaks French."

"He is quite an idiot," said Raymond, turning to Ebenezer.

"Bah! Don't trust him! It is a dodge. He is trying to get rid of us. These cursed spies have a hundred shots in their bag. But it is not good enough for me, and we shall

have to get a light on this. Look here! be a little more candid," said he, addressing the prisoner. "Did Timothy Campbell pay you for spying after me? How much did he give you? I will give you double if you will tell me honestly."

The man never frowned. In a distracted manner he pulled a piece of grass and muttered unintelligibly between his teeth.

"We must end this," said Raymond. "Let us take him along, and hold an inquiry at Drill Pit. We will see if he is known, and if he is an idiot or not. I do not know why it is, but I have a sort of confused recollection of his face. I fancy I have seen him before somewhere. Will you come with us?" he added, addressing Peter Murphy, who did not seem to hear.

Cassoulet went behind, and lifted the poor creature up to stand on his feet. He weighed so little that this was easy enough. He allowed himself to be led away without protest, or, rather, as if he did not mind what happened to him. It was only when he saw the launch that he showed any feeling.

"Peter Murphy, good sailor!" said he with a vague smile. "Peter Murphy, great traveller!"

To make good his assertion, he tried to jump into the boat; but, unfortunately, he took off so badly that he fell into the water, and would have been drowned had he not

been fished out and hoisted on board, where he was set up against the boiler to dry. His ducking did not seem to trouble his serenity in the least.

But this indifference had not the least effect on Ebenezer Curtiss. He saw in it only a proof of his suspicions.

"What a play-actor!" he said to Raymond. "He is a good hand at it, evidently—a very good hand. But we will open his eyes for him!"

However, the launch easily ran up the stream, and was soon back at Drill Pit. On the wooden quay Raymond noticed a young lady, who was probably waiting for the return of the boat, and who shook her umbrella when she caught sight of it. She was very nice-looking, and elegantly dressed, with the exception of a few details which would have appeared in France as being in execrable taste at her age,—such as feathers in her hat, large diamonds in her ears and on her hands, and a gold comb in her blonde hair.

"That is Madge! That is my daughter, who has just come from New York!" said Ebenezer as he saw her.

And he jumped ashore and ran towards her.

"Here you are, back at last, papa! I have been waiting for you a good half-hour!" said Miss Curtiss, as he clasped her in his arms. "We had a little plot, mamma and I, to surprise you at your office, and it failed because you were not there. We did not care to pass the night on the car."

"Well, my dear, don't grumble at your father, who is too happy to see you. How could I know you were here? And why did you not wire? My dear Frézols, you will excuse me, will you not, if I leave you a little brusquely? Clear up this Murphy affair; I leave it in your hands."

And the petroleum king walked off without a thought of introducing Raymond to his daughter.

Madge, for her part, did not apparently think that the young man in his working clothes was worth the least attention, and the only notice she took of his salute was a vacant stare as she accepted her father's arm and walked away with him.

The young Frenchman remained much embarrassed by the legacy Ebenezer Curtiss had left him. What was he to do with Peter Murphy? How could he "clear up" anything about him? What right had he to keep him prisoner? and what reason could he give for subjecting this imbecile to new interrogatories? He would have found it difficult to say.

But nevertheless, this living problem inspired him with a mingled curiosity and pity he could not explain. He seemed to discover, in a vague way, in Peter Murphy something which connected him with his own history, with an obscure past, with remembrances so distant that they were almost effaced. Or, rather, it did not go quite as far as that, and Raymond could not even formulate the feeling

that attracted him towards this miserable ruin of a man. Brotherly instinct, natural compassion for an unfortunate being, French as he was, and, like him, seeking his way in a foreign country—that was what he would have said if he had been asked to describe the feeling which made him ask,—

“Have you had anything to eat this morning? Are you hungry? Will you come with us?”

The albino, dripping from his involuntary bath, was more helpless than when he had been first caught. He did not answer a word.

“Bring him along with us,” said Raymond. “We will give him some old clothes while his own are drying.”

Cassoulet took the hand of the stranger, who allowed himself to be guided like a child, and stepped into the yellow-bodied coach without even noticing the eccentricity of such an abode.

They took off his clothes and gave him dry ones, and he showed not the least satisfaction. But when he saw before him a plate of beans and a large slice of bread, that was another affair altogether. He attacked the food with voracity, caused it to disappear in the twinkling of an eye, rubbed his hands vigorously, and said,—

“Peter Murphy, content! Peter Murphy, enjoyed it!”

CHAPTER III.

RAYMOND AND CASSOULET.

RAYMOND FRÉZOLS had a tender heart for the unfortunate. He knew by experience how hard was the battle of life when it is fought alone and without support. His story was a strange one. He had been left an orphan in his fifth or sixth year, and knew nothing, or almost nothing, of his family. His first recollections were of a whaler, the *Belle Irma*, commanded by his father, whom his mother accompanied on his voyages. That he remembered the name of the ship was owing to its having been one of his first reading-lessons, he having traced it out letter by letter on the boats. Even his mother had left on him but a vague and fugitive impression, that of a fair-featured, pale young woman lying in a hammock.

One day—when he was about four years old—they had told him that she was dead. He hardly understood what they told him, and all he noticed was that the gentle vision had vanished from his life.

Then his father took her place, dressing the little boy in the morning, putting him to bed at night, looking after him during the day, walking with him on the deck and holding his hand, joining in his games, and teaching him without effort a thousand elementary things in his inexhaustible conversations.

But suddenly this intercourse was broken by a tragedy. It was in a deserted bay in a wild and tropical country. Captain Frézols had gone ashore in his boat with half a dozen men, who came back to report that he had been killed by a blow from an axe. How had the murder been committed, and by what hands? Raymond, who was playing with a cabin-boy, had never heard. He saw the mournful procession that brought the corpse to the chamber of honour, and he was at the burial next day, and saw it disappear into the waters of the bay with the shot at its feet. His despair was bitter, but, like all childish griefs, it was soon effaced by new impressions.

Days passed. It was the mate of the ship, Achille Kélern, a very young man, who had taken the command. Raymond remembered his name, and his face, but knew no more of him, except that after a long voyage the *Belle Irma* was anchored off Quebec in Canada, and the young man took him ashore one afternoon and led him through the town. It was a long walk through unknown streets until they reached a suburb, where the man hired a cab,

put Raymond inside, and, taking the reins, drove out into the country.

"Where are we going?" asked the child.

"To the Falls of Montmorency. You will see how beautiful it is. A sheet of water falling sixteen meters in height; the greatest wonder in the country."

Curious in such things, like all children, Raymond went along gladly. They arrived at night at the cascade, and the horse was put up at the stable of the hut which served as an inn. Achille Kélern asked for a bedroom and supper. And the child, overcome by fatigue, fell asleep with his head on the table-cloth. When he awoke next day, on the bed where he had been laid in his clothes, Achille had disappeared!

It was thought at first that he had gone on an excursion in the neighbourhood, and that he would come back for his little companion; but he was never seen again, and all the circumstances of the affair showed that he had voluntarily abandoned the child. The innkeeper, Mr. Martin Fabre, went to Quebec to inquire about the *Belle Irma*. She had sailed for an unknown destination. He was a good fellow, and his wife, Dame Jacinthe, had a heart as good as his own. Like many of the Canadians, they were of French extraction, and were descended from the first emigrants sent out by Louis XIV. to the colony which was then called New France; their language, their costume,

their manners, their name even bore witness to this origin. They were deeply moved by the misfortune of the little Frenchman, and the sad fate which awaited him if they sent him to the county poorhouse, according to the advice of their less charitable neighbours. And, in short, they resolved to keep him and bring him up as their own child.

"Come, my little boy, don't be miserable," said Dame Jacinthe. "You shall stay with us until they come and look for you. And if they never come, we shall have one son the more!"

They already had three. The inn was not very flourishing; the charge the good people took upon themselves would be a heavy one. But with courage and goodwill they might get through with it all right, and, as Martin Fabre philosophically said, "Where there is enough for five there is enough for six."

In answer to their inquiries, all Raymond could tell them was his own name, that of Achille Kélern, and that of the *Belle Irma*. The few attempts they made to discover his family, having no sufficient basis, resulted in nothing. The present is everything for a child, and the past is soon lost in a vague mist. Raymond came to forget that Dame Jacinthe and her worthy husband were not really his mother and father. They sent him to the village school; when the time came for him to be apprenticed they

placed him under a ropemaker, an old sailmaker of the American fleet, who had seen different countries and was as clever at spinning yarns as he was at twisting them.

This good old man had a few books, which Raymond devoured. In the evening he told Martin Fabre's three children what he had read, and in that way he soon acquired in the country the reputation of a learned man. His adoptive father was positively dazzled by his knowledge.

"My boy," he would say affectionately, stroking Raymond's head, "you were not made to remain here anchored to a rope."

He told the truth even more than he imagined.

These speeches, and others like them, gave Raymond a longing to see the world. This determination to be independent was brought to a head by a change he noticed in Dame Jacinthe. The good wife loved sincerely her adopted son; but she loved better her son Barnabé, the eldest of her children, who was about the same age as Raymond. Now Barnabé was not particularly shining in intelligence, and the comparison was never to his advantage. Dame Jacinthe resented this inferiority, and, without knowing it, often showed her disappointment by ill-humour and injustice. As to Barnabé, a certain jealousy began to show itself with regard to his adopted brother, and this grew as he grew. The little Frenchman felt all

this keenly. He was fourteen ; he was clever and strong, full of courage and ambition. One evening he went in search of Martin Fabre.

"Father," he said, "it is time that I should look after myself and go and seek my fortune. For eight years you have treated me as a son ; it is my turn to try if I cannot return you what you have done for me by making your old age comfortable."

In all North America the children are accustomed to earn their own living as soon as possible ; and families are never astonished to hear them state their intentions in this manner. Neither Martin Fabre nor his wife opposed the least objection to the boy's desires. They gave him the permission he required, received his farewells, and wished him good luck.

At Quebec he went on board ship and worked his way to Philadelphia. There he began a strange career ; one of those desperate struggles with the most different professions and incongruous studies, in which the weak succumb and from which the strong emerge with their characters fully formed. Of boundless ambition, indefatigable ardour, and a passionate desire for knowledge, Raymond divided his days into two parts ; one he devoted to earning his living in whatever trade first offered itself, provided it was honest ; the other he spent in the libraries and at public lectures, or in the solitude of his room, learning

everything he thirsted to know. Languages, ancient and modern ; sciences, mathematical, physical, and natural ; drawing ; discoveries, theoretical and technical, in the arts and trades,—were all attacked by him. Helped by a lively intelligence, an excellent memory, and a well-marked gift of invention, he retained all he took up, went without effort from one study to another, guessed what he had not the time to make sure of, and found a never-failing pleasure in continual change. By turns he was printer, engineer, chemist's assistant, electrician, teacher of geometry, sailor on a steamer, gold-digger in California ; looking on none of these as the object of his life, but as a means of penetrating the secrets of human industry and preparing himself for some grand enterprise still undetermined.

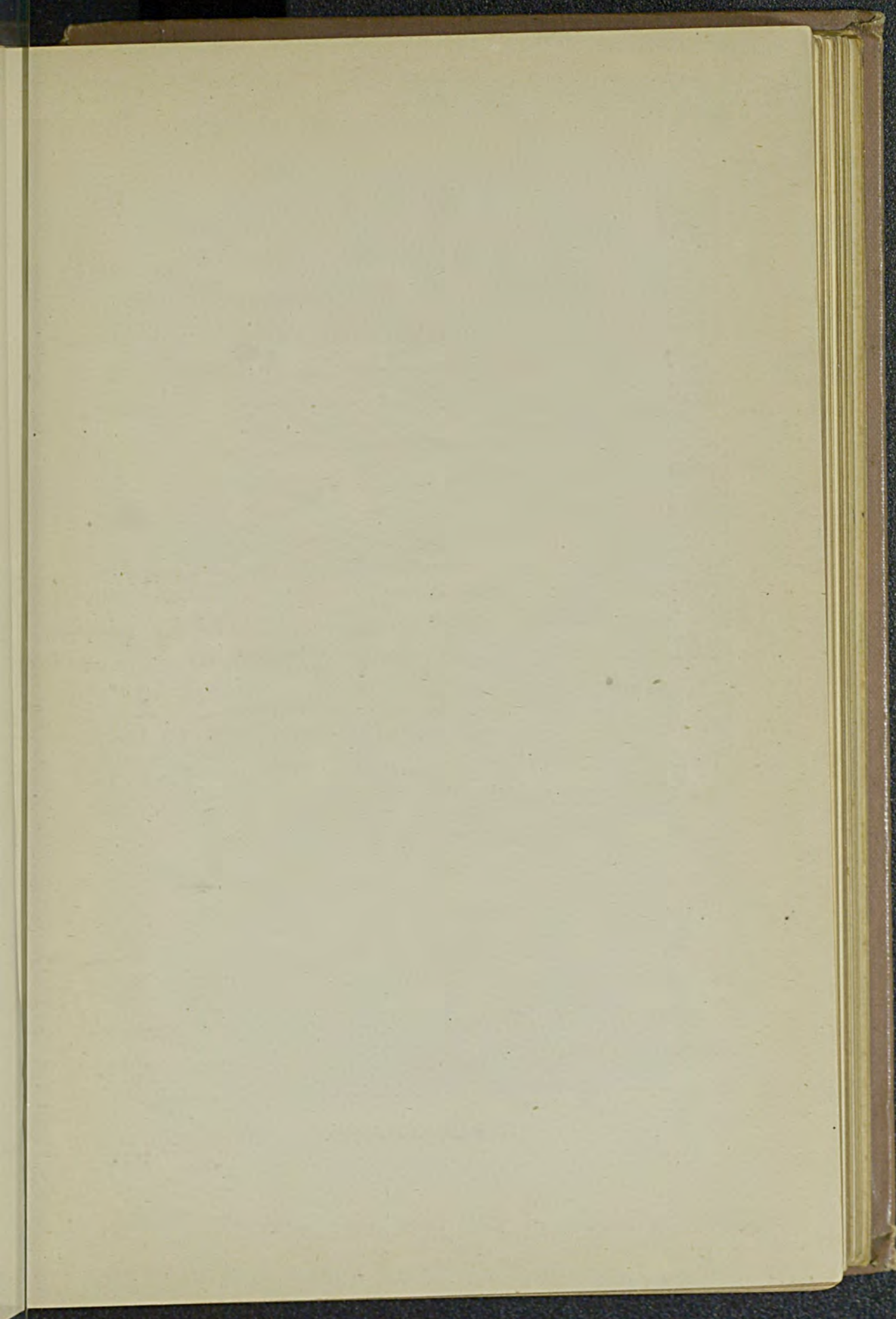
He travelled much, sailing to Europe to see his native France—of which he was proud, and which he always looked upon as his own country—returning to America, where he easily found employment for his many faculties, and running through America from sea to sea like a steam engine, and ceaselessly studying it under all its aspects.

An example among many of his devouring activity and the habitual tendency of his inventive genius we may give. He had remarked the eagerness with which the travellers from New York to San Francisco, or from San Francisco to New York, by the Pacific line threw themselves on the

newspapers each time they entered a railway station during this journey of five days. The idea occurred to him to feed this voracity by a newspaper printed in the train itself, and fed by telegrams at all the intermediate stations. Evidently, no local sheet printed before the arrival of the train could compete with his in publishing the most recent news. The idea being struck out, Raymond Frézols at once put it into execution. To buy a portable press, to agree with the railway authorities for space in a corner of the car, to apply to the telegraph companies for news he could pick up hour by hour as he went along, to reproduce these messages in successive editions of the *Lightning Express*, took the young Frenchman but two days. He was then eighteen. His idea had a prodigious success, and amused America for a fortnight. But Raymond had no intention of devoting himself to travelling journalism on the Pacific Railway, and two months later he was at Bordeaux studying the maritime exhibition.

It was there that he met Cassoulet and took him under his protection. The matter occurred in this way. Raymond was to leave Bordeaux next morning, and taking advantage of a fine night in June to enjoy a walk in the suburbs, he stumbled on a child about eight years old who lay senseless, bleeding, and covered with dust, on a heap of road-metal.

Raymond took him in his arms and carried him to the





He bathed his temples.

bank of the Gironde close by. He bathed his temples with cold water, washed away the blood with which his face was covered, and assured himself that the wound from which the blood came was not a serious one; it was a simple scalp cut, caused, apparently, by a fall on a sharp stone. The pulse beat normally, and soon the child opened his eyes, and looked with astonishment at the man who was taking care of him. Almost immediately he made a gesture of terror, and attempted to get up so as to run away.

"Don't be afraid," said Raymond; "I will do you no harm; when you can speak, tell me where your parents live, and I will take you home."

"I have no parents," said the child in a feeble voice.

"You have no home?"

"No home."

Raymond looked in silence at the little wounded one, who was now breathing more freely, and appeared to be regaining strength. He was clothed in a frock and trousers of grey cloth, and a flannel shirt. He had no waistcoat or stockings, but on his feet were a pair of large shoes, and on the collar of his frock was a conspicuous number in white; from all of which he would seem to have come from some house of correction.

"You have come from a prison? You have escaped?" said Raymond.

The child did not answer, and suddenly began to cry.

"Oh, don't take me back, sir! Don't take me back!"

"Be easy, my boy; that is not my business. I am not a gendarme. I will take you to the 'Lion d'Or'—that inn down there—and give you something to eat, for you seem to want it. Then if you like you can tell me who you are, and if I can be of use to you, I will. Now, make a good try!"

The child, encouraged by these kind words, and still more, probably, by the loyal, gentle face of his new friend, struggled to his feet, and tried to take a few steps. But he was so weak that he would never have reached the 'Lion d'Or' if Raymond, sometimes supporting him, and sometimes carrying him in his arms, had not helped him over the hundred yards which separated them from the inn. Before they reached the door, Raymond cut off the number from the boy's collar, so that no one could inform against him, and soon he was seated at dinner in the little low room.

It did not take him long to gain the boy's confidence.

"What is your name?" he asked, when he saw he had been cheered by a large plateful of cabbage-soup and a glass of wine.

"They call me Cassoulet, but that is only a surname,"

said the small one. "I am from Castelnaudary, and as I am always talking of 'cassoulet,' the favourite dish in my part of the country, my playfellows have called me that as a nickname. At home I am called Michel."

"And where is home?"

"At La Tizarne, a farm, where I looked after the pigs."

"Your parents are farmers?"

"No; I never had any parents," said the child; "or at least I never knew them. I had only a little brother. He was called Cadet. I think he was seven years old, and I was nine; but I am not sure, because we never had a father or mother to count them for us."

"Who looked after you, then?"

"No one. Cadet collected the horse-waste on the road, and when he had a basketful, Mr. Tesseyre gave him a piece of bread."

"Mr. Tesseyre?"

"Yes, a great wine-merchant amongst us, and very rich. La Tizarne belonged to him, and he let us sleep in the stable. We were not cold there, and we found it comfortable. On Sunday we went and saw Mr. Tesseyre, who gave us two sous to buy barley-sugar with. Sometimes a lady stopped Cadet in the road, and gave him a little piece. He was so pretty, was Cadet! So small and pale, with great black eyes and curly hair. We were very fond of one another."

Cassoulet told these things so innocently and simply. Refreshed by his dinner, and reassured by his friend's kindness, he had forgotten all his miseries. His brown face, already marked by poverty, assumed a more serene expression. Although he was not good-looking, his face betokened intelligence and candour. He was manifestly deeply devoted to his little brother. How did he come to be shut up in a house of detention? Raymond asked him point-blank.

"That was three years ago," said the youngster, "one day the valet came into the market at Castelnau-dary, and told us that Mr. Tesseyre was dead. We were very sorry, for he was good to us, and we cried as we followed him to the graveyard. But we did not know all the consequences that were to follow for us. First, they sold the farm, and then people came to pull down the houses to make the place a candle-factory. They had already sent the pigs to market, so that I had nothing more to do with them. I looked about for work with Cadet, but no one would give us any. They treated us like vagabonds and beggars, and said they would send us to the poor-house. And then we went to Toulouse and Agen, hoping to find something to do. Sometimes we helped in harvesting the corn, or gathering the grapes; that was during the summer and autumn. Once—it was at Agen—it was very cold, and we had eaten nothing since the day before. Cadet could not

drag himself along any further, and cried as though his heart was breaking. Then I said to him, 'Wait here on the steps of this church, and I will go and beg.' As true as I am here, sir, that was the first time. I went through the town, but it began to snow, and night came on, and there was no one in the streets. At last I saw a gentleman coming out of a house, and putting on his great coat. I went to him, and asked him for a sou for my little brother who was dying of hunger. He drove me away harshly, treating me as if I was good for nothing and lazy, saying it was a shame for me to be begging at my age. As he went away I saw on the ground, in the snow, something black: it was a pocket-book. I picked it up, and I ran after the gentleman, who had, I thought, dropped it. Although he was walking very fast, I caught him up, and when I reached him I caught hold of his coat, for the cold, the excitement, and the speed at which I had come had made me breathless, and I could not speak.

"'Again, you!' he said furiously. 'What have you there? My pocket-book! You have robbed me, you wretch!'

"Without giving me any time to explain, he took me to the police. I was in rags, without a home, and with no papers; no one had seen me at Agen; and my accuser was a well-known merchant. They could but believe him and condemn me. My little brother was taken from the steps

of the church where I had asked them to go for him, and sent back to Castelnaudary to be kept at the expense of the commune ; and I, accused of vagabondage, mendicity, and theft, was by the decision of the tribunal sent to the house of correction of the department. I have been there three years, and I cannot tell you what I have suffered. But the greatest of my sorrows was to be told six months ago that my poor little Cadet is dead,—dead without seeing me again, in a poor-house ! It was the director who told me this two weeks afterwards, when he read me the official letter which gave him the information for me. How shall I tell you, sir ? The thought of remaining till I was twenty in that prison was hateful to me. If you only knew what goes on, and how difficult it is not to become a thief, if by chance you are not one when you go in ! Three times I tried to escape, but each time I was caught, and my attempts got me treated with more severity. At last, the day before yesterday, I slipped down a drain-pipe, under the floor of the central court, which is being repaired. I reached the railway and hid among some empty casks on a goods train. My plan was to get to Bordeaux, and hide in some ship that would take me far away. Everything went well for a time, and for a day and a night I was not seen by the men, hiding in the cask. But as we were getting near Bordeaux I jumped out while the train was running, so as not to be caught in the railway station. I

was very weak, as I had eaten and drunk nothing since I started ; and I hurt myself as I fell, and all I could do was to get through the hedge by the side of the line, and drag myself along to where you found me."

CHAPTER IV.

EBENEZER'S DEN.

RAYMOND FRÉZOLS was much affected by Cassoulet's story, and began to think if he could be right in doing something to help the little fellow first, and then abandoning him immediately afterwards. His conscience answered him that it would be wrong to do so, and told him that here was a higher and completer work to enter upon, to save a poor being from misery and degradation, and atone for a great social injustice.

When he himself was seven years old had he not been an orphan alone in the world, poor, and without help, like this one? Fortune had given him Martin Fabre and Dame Jacinthe to take him to their fireside, and give him the taste for work, and make of him an honest man. Without them, to what depths might he not have rolled?

It was not enough for him to show his gratitude to them by sending them every month a part of his earnings. He owed it to the world of honest men where they had placed him, and he owed it to himself, to render the same service to some poor boy that had been rendered to him.

Thus he communed with himself, and the more he thought the more he became convinced that his duty, his strict duty, was to complete the moral rescue of the poor child that chance had thrown in his way.

His mind was soon made up.

"If I take charge of you," said he to Cassoulet, "if I give you the means of going to America to learn a good trade, and become of use to yourself and others, will you be satisfied?"

"Oh, sir," said Cassoulet, joining his two hands in an impulse of ardent hope, "if you will do that, my whole life will not be enough to show how I thank you."

"Well, I will do it; or rather I will try it. And first we must get a bed here, where you can sleep to-night. I will take away these clothes, which would betray you to those who are in search of you. To-morrow morning I will bring you other clothes, and if I can arrange matters as I wish, to-morrow evening we will leave Bordeaux for the United States."

And the programme was carried out in its entirety.

Cassoulet had a nice bed with white sheets such as he had never had before. He slept for eight hours straight off, and did not awake until Raymond came into the room with a bag, in which he brought a cabin-boy's clothes. After a thorough wash he put on this costume, and then, with his protector, entered a cab which took them straight

to the quay at Pauillac; and then they went on board an American vessel, which weighed anchor that evening. Twenty days afterwards the two friends landed at New York, and from that day they had never left each other.

Not for a moment had Raymond regretted his generous action. Not only was Cassoulet honest and good, but he was brave, intelligent, ingenious, and just the sort of boy for hard work and adventure. He soon became of great and varied use to Raymond. No one could excel him in understanding his instructions, finding out his wishes, and accomplishing them. He was a model apprentice, or rather, the devoted page of this wandering knight of industry. Their intercourse partook by turns of that of a pupil with his master, a soldier with his officer; but it also bore a fraternal character in that constantly working together, in which Raymond found the best recompense for his good deed by never again being troubled with those hours of sadness which had weighed on him so heavily in his solitude. Cassoulet was as gay as a lark, and wanted only a ray of happiness to blossom forth in all the vivacity of his southern temperament. To these American surroundings, at times a little gloomy and grey, he brought a touch that was truly French, which Raymond could not but appreciate. Together they cheerfully trudged along their laborious path, and success was not slow in crowning their efforts.

At first they had worked in New York in a chemical laboratory engaged in some practical researches with regard to sugar-refining. Then having made some money by the invention of an automatic writing machine and the sale of its patent, Raymond had come to try his fortune at the oil-fields.

With regard to these deposits he had a notion of real value, which has since become famous under the name of the belt theory ; that is, that the subterranean pockets in which the precious liquid is distilled and stored always lie in a direction running north-east and south-west. If this notion is correct, it follows that after two or three wells are sunk, the area of search and consequently the sales of land are limited. Observation has so often confirmed this empirical rule that it has become customary to sink new wells in the zone marked by the three first within "the 45° line," as the miners call it.

But it does not follow that all the wells are necessarily driven into oil. Far from it ! There is even something astonishing in so many people succeeding in striking the pockets of oil, even in rich country, when one knows that the pockets vary so much in shape and capacity, and are almost always separated by wide intervals in which hundreds of wells may be sunk in vain. The trade of an oil-well sinker is not at all unlike that of a fisherman throwing a harpoon at random into the Newfoundland sea. Al-

though the fish may be abundant, his chance of striking them is obviously very slight. And we may add that a petroleum well is a harpoon stroke of from seven to eight hundred meters in depth, through various kinds of rock, and costing a thousand francs for every hundred meters.

The outfit is not complicated, but it costs a good deal. It consists essentially of three things: (1) a derrick; (2) a monkey carrying a long bar of steel terminated by the borer; (3) a steam-engine of from twenty to thirty horsepower. The derrick is, as we know, a pyramidal structure of heavy scantling from twenty-five to thirty meters high, and used to raise the monkey with its rod and borer, to allow it to fall with all its weight, and so pierce the rock. The steam-engine is to raise the monkey by means of a rope working on a windlass. When the site of the well is decided on, a commencement is made by digging a shaft about five meters in depth, which is lined with a wrought-iron tube of from twenty to twenty-five centimeters in diameter. Above this shaft the derrick is erected, flanked by its accessories; and then the boring begins.

When the ground has been bored for some time under the repeated blows of the monkey, which falls by its own weight and rises by engine-power, operations are suspended to renew the borer, which is used up very quickly; and during the interval there is introduced down the shaft a sand-pump, formed of a cylindrical tube with valves open-

ing upwards for the extraction of the detritus. After that is done the walls of the well are lined so as to prevent the water breaking in, and the boring is resumed, often continuing for many months. Finally, if the oil is reached, a metal tube of two or three inches in diameter is put in the well, provided with two or three indiarubber pads just above the petroleum. These pads prevent the gases from escaping, and guide them into the tube so as to cause the ascent of the liquid.

Such are the essentials in working a petroleum well. Once the derrick is built, four workmen will generally suffice to do the boring. They are each paid three or four dollars a day, representing about two thousand francs for salaries during the month to be added to the cost of establishment, for the renewal of the tools, and for the fuel. On the other hand, once the well is finished, all that has to be done is to collect the oil and store it.* But it often happens that the well yields so little that there is not even work enough for one man ; and often the yield is nothing at all. For the 20,000 derricks that have given their owners a more or less abundant flow there are 500,000 others in different parts of Pennsylvania that do not yield a drop.

The wells of Raymond Frézols were of this latter number. In vain had he established himself at Drill Pit with Cassoulet, and devoted three whole weeks to earnest

study of the ground and the wells at work. Vainly did he follow the rule which experience was confirming on all sides of him. The subsoil of his particular lot probably contained oil, but it was not his luck to find it, and his little capital was almost entirely swallowed up in the venture.

But at least he had gathered quite a harvest of observations and experiences. Want of success even has its uses for the strong, and prepares their triumph. An idea, ingenious and grand, had risen in his brain while he worked. The realization of that idea would need a large sum of money, and looking round for some one to apply to, he thought of Ebenezer Curtiss.

The petroleum king was not perhaps a man of genius ; but he had the rare merit of giving himself up entirely to what he undertook, and probably owed his colossal fortune to that one merit. In his eyes there was nothing interesting but what affected petroleum. All his thoughts worked round that one object. If he had been asked why the world possessed timber and Bessemer steel, he would likely enough have replied, To make derricks and borers. Mineral oil was with him a product of prime necessity, which could be applied to the most varied uses, notably to the boilers of steam engines and industrial machines, as well as to lighting purposes. He enjoyed its odour, and when he had a cold would assert that nothing did him so much good as

a spoonful of petroleum. His natural enemies, electricity and gas, were not only proscribed in his house, but he could not even hear them spoken of without anger. The extraction of petroleum, its transport, and its market prices occupied his mind night and day.

Ebenezer Curtiss was, however, not content to lay up the splendid revenues he received from his wells. He had only to leave them alone to see them pour out every day five or six thousand dollars, that is to say from seven to eight million francs a year. But that was not good enough for him, it wearied him, and seemed tame. He revelled in great speculations on the New York markets, the fever of the gambler, the ups and downs of the fortnightly settlements.

Mineral oil is rapidly becoming a commodity in which the American exchange gambles as much as in rail shares. At first petroleum was simply sold by private contract. But the continual variation of its prices, according to the more or less abundance of its production, or the progress more or less of its consumption, soon made it a favourite subject for speculation, and when it became the practice to store it in large general depôts against warrants which could be passed easily from hand to hand, speculation became the rage. And, in consequence, there were most surprising variations in the value of the warrants.

The first petroleum from Drake's well, for instance, sold

for twenty dollars the barrel of 336 litres. In 1860 it had fallen to two or three dollars. In January, 1861, it was quoted at fifty cents without finding a buyer ; and eighteen months later the value of the barrel oscillated between twenty-five and fifty sous. Then suddenly the demand increased, and the price went up to four dollars, to soon reach twelve. Such oscillations took place every day with their usual accompaniment of sudden fortunes and irretrievable ruin.

It was entirely on account of the gigantic operations in which Ebenezer Curtiss was engaged that his name occurred to Raymond Frézols when thinking of the realization of his project. And one day, about two o'clock, he called on Ebenezer.

Like all industrial Anglo-Saxons, the petroleum king had his office quite away from his dwelling-house. At night he lived in his beautiful villa to the south of Drill Pit. By day he was at his office in the middle of the town.

There was nothing luxurious about the office. It was a large room, simply furnished with white oak tables and chairs or stools, on which sat a score of clerks ; a small cupboard railed off for Jacob Freeman, his cashier, and the friend of his childhood ; a very plain room for himself,—and that was all. On his cylindrical writing-table stood a telegraphic tape machine, such as are found in all public

bars and hotel vestibules in America, reeling out a blue strip giving the prices of the New York exchange. And these prices seemed to be particularly interesting to Ebenezer, to judge by the uneasy attention with which he followed the tape.

"Forty-eight cents — forty-seven — forty-eight — forty-eight — forty-six — forty-seven and a half — forty-six — forty-five —" said the little blue strip.

"Still a fall!" murmured Ebenezer, seated in his cane chair. "It is intolerable. If it goes on, they will end by giving oil away for nothing, for the price will not cover the freight."

"Forty-five — forty-three — forty-four — forty-two — thirty-nine — thirty-seven — thirty-six — thirty-seven — thirty-three —" continued the telegram.

"Thirty-three!" said Ebenezer. "That is a fall of fourteen cents in ten minutes! It is madness!"

And the inexorable blue ribbon came reeling out!

"Thirty-three and a half — thirty-two — twenty-seven — twenty-four — twenty-three and a half — twenty-two —"

"There must be a panic, a regular panic!" exclaimed the petroleum king. "I never saw the like! Jacob!"

And he touched the button of an electric bell.

An austere, parchment-like face appeared at the inner door.

"How much do we stand to buy?"

The head disappeared, proceeded doubtless to a verification in the depths of its den, and returned with the following number,—

“3,940,000 barrels.”

“So I thought. What is the reason of this unprecedented fall?”

As if in reply to this question the little blue tape, after a long blank space, reeled out,—

“It is said that the cause of the panic is the formation of a company to supply the petroleum from the Caspian Sea into European Russia through a subterranean tube.”

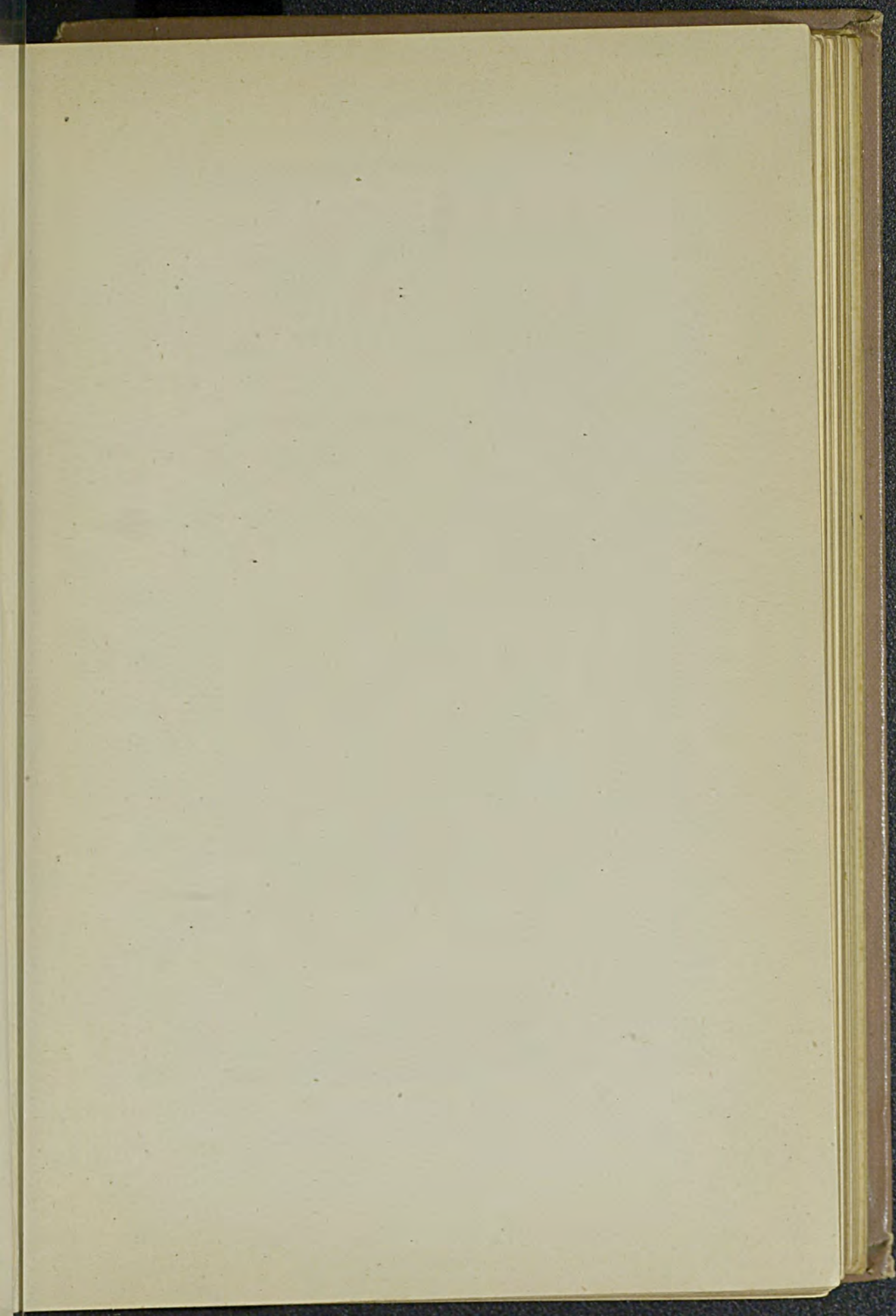
“The deuce fly away with Russian petroleum! We don’t want it to come and upset our business! And when will this tube be ready, you pack of imbeciles? Cannot you see that it will be months, if not years, before it can get to work?”

These objurgations of Ebenezer were mentally addressed to the New York bears.

The little blue tape again began on the prices with the impartiality of a history—

“Twenty-one—twenty-one and a half—nineteen—eighteen—seventeen—sixteen—”

The tape was at sixteen when the office boy entered with a card, which he placed before Ebenezer Curtiss, who cast his eyes on it, and read the unknown name, “Raymond Frézols.”





"I am not at home to anybody."

"I am not at home to anybody!" he said, pale with anger.

"Not even if he were to bring you another fortune?" said a cheery young voice at the threshold.

At the same time Raymond came forward, smiling and courteous. He had never supposed that Ebenezer would refuse him an audience, or that if he listened five minutes he would fail to be pleased by his plan. But he had reckoned without a host whom the demon of gambling entirely possessed.

"Do you come to show me how to send up dollar petroleums that are now at sixteen cents?" growled Ebenezer, furious at what he considered was an ill-timed joke.

"The means of sending up petroleums?" said the Frenchman. "Candidly, I do not," he continued, after a moment's reflection. "My plan is rather of a nature to send them down, at least in Europe."

"Send them down when the price is sixteen and the fall costs me five or six million dollars! That is what I call a brilliant idea! You need not waste your time here, young man," said Ebenezer rudely; "I have something better to do at present, and, as I have told you, I am not at home to any one."

"So much the worse for you, Ebenezer Curtiss," said Raymond coldly. "But the day will come when you will

be tired of losing on the Exchange the produce of your wells ; and when it will be agreeable to you to treble that product, remember that I know the way, and I alone can help you !—on condition, of course, that I have not gone elsewhere.”

On which he bowed and disappeared. And that was the first meeting between Ebenezer and Raymond.

CHAPTER V.

A TRAVELLING OFFICE.

WHEN he left Ebenezer, Raymond was more disappointed than he cared to show. He returned at once to the hotel where he lived with Cassoulet, and which bore the ambitious name of "Palace House," a name for which there was little justification, as there was nothing of the palace about the establishment. It was simply a long, low wooden construction, like a farm-shed, planked in on all four sides. On the ground-floor was a room which it was necessary to cross to reach the staircase leading to the bedrooms. In this sort of vestibule was a bar, that is a long pewter counter, where the master of the establishment, flanked by half a dozen shock-haired barmaids, dispensed the cloudy liquid he called "Double Bass," and the apple brandy and sundries which combined into pick-me-ups, cocktails, cobblers, and eye-openers.

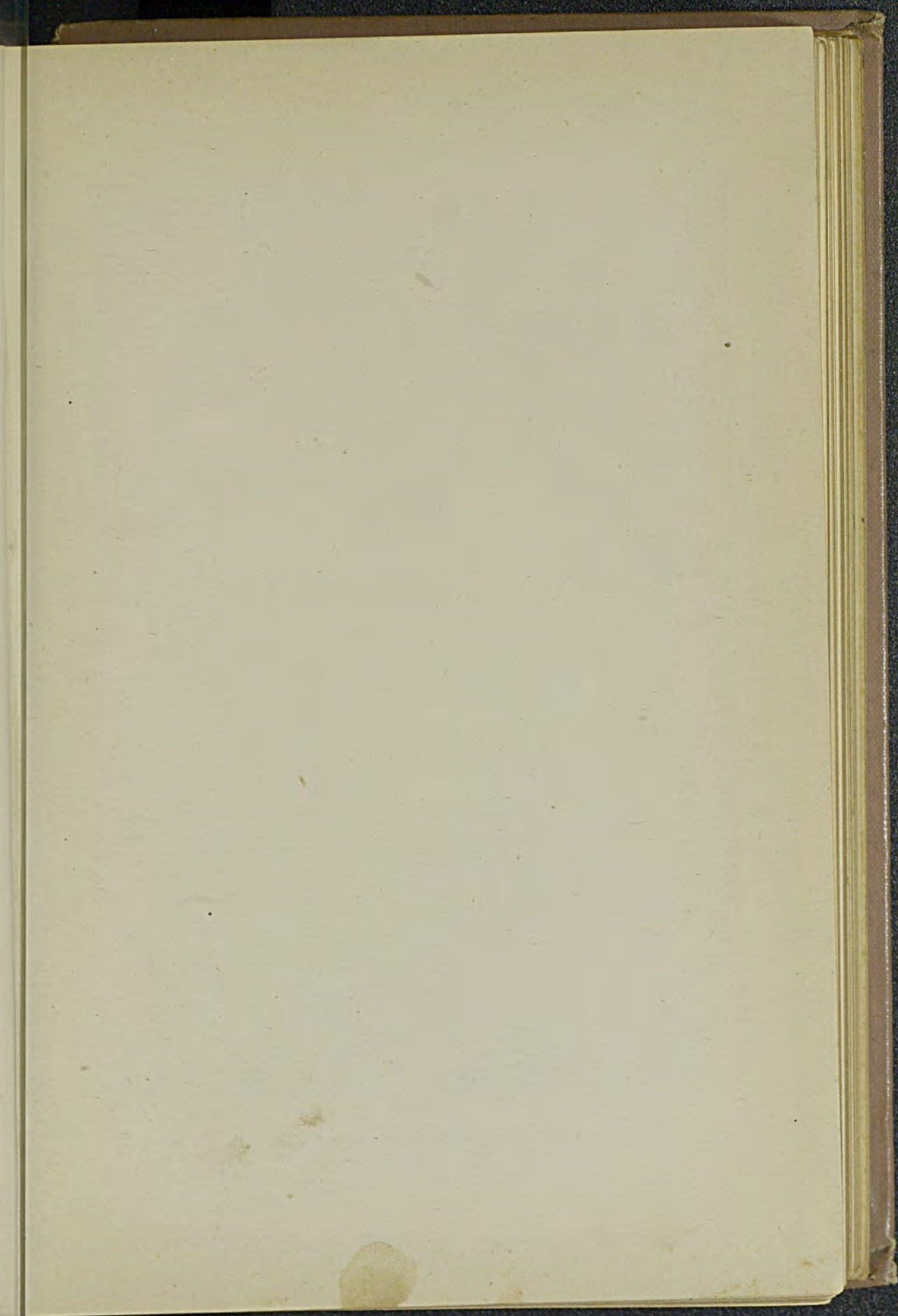
The consumers of these subtle poisons belonged, for the most part, to that species of adventurer found in all countries where the treasures are subterranean. They swarm

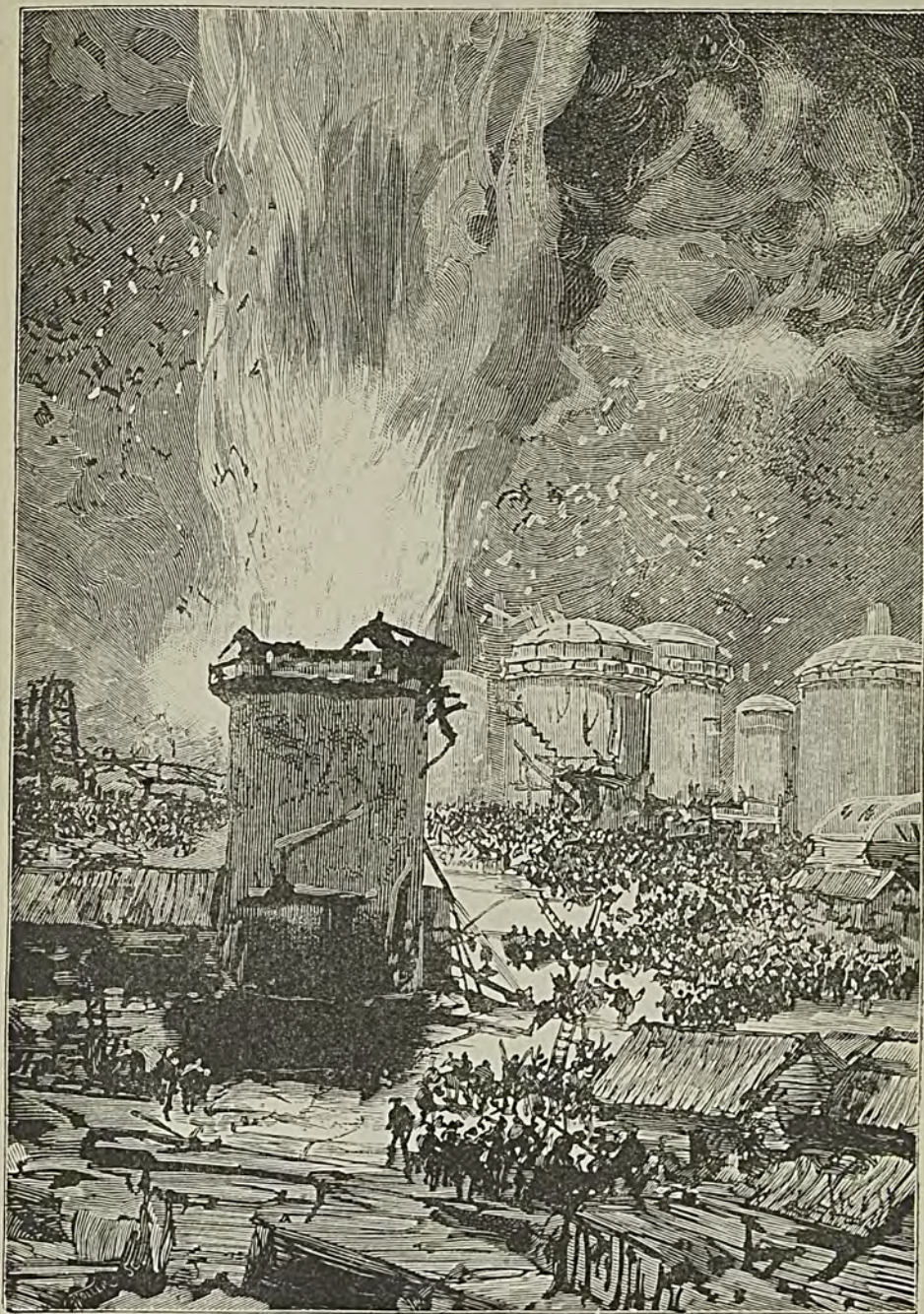
like locusts in California, in Australia, in the diamond-fields of the Cape, and the oil region of Pennsylvania, wherever there is a chance of realizing a fortune in a few days. Among them are Britons burnt brick-red by the sun, surly Spaniards, lively Frenchmen, gesticulating Italians, heavy Germans, and innumerable Chinamen notwithstanding all the States can do to check their immigration; the whole assemblage drinking and talking amid quite an uproar of a Babel of tongues, and picking at the pulled bread and tiny cubes of cheese that a large basket on the counter held for the entertainment of the drinkers.

Raymond had beheld this scene of drunkenness a hundred times before. He scarcely noticed it, as a rule. Did he particularly notice it to-day on account of his mind being full of gloomy ideas? Likely enough, for he went upstairs determined to take Cassoulet away from such scenes, and change his lodgings without delay. He at once asked for his bill, and told his little friend to prepare for departure. And then the two went out to look for new lodgings.

They had been out for about a quarter of an hour finding nothing suitable, when there was a great uproar in the east of the town. Running that way, they soon found themselves in the presence of a grand and terrible scene.

A mighty pillar of fire shot up to a height of eighty meters at the least, under whirling volumes of black smoke,





There were many other such reservoirs around.

which covered the sky over an immense expanse. Either accidentally or purposely, a reservoir of petroleum of 50,000 cubic meters had caught alight. There were many other such reservoirs around. Stinking vapours were spreading in the air, and oily flakes were showering on the town, threatening to cause a general conflagration. The crowd was gathering within sight of the fire, and barely gave room for the passage of the fire-engines, which arrived with the horses at triple gallop. Lines were formed to pass canvas buckets from hand to hand from several supplies, and every one worked hard to prevent the fire from spreading, but without much effect. The fire had already claimed its victims; three workmen who had not been able to escape in time had been horribly charred at the foot of the flaming reservoir. Five or six others, dreadfully burnt but still alive, were being carried into the neighbouring chemist's to be attended to.

There was tumult and confusion in all this part of the town.

Such a fire is a frequent occurrence in the oil country, and beyond the zone of immediate danger work went on as usual, and people attended to their business with as much indifference as if the fire were a hundred leagues away.

Raymond and Cassoulet had at first helped to pass the buckets. But Raymond soon noticed that the stream

from the fire-engines, instead of subduing the flames, seemed to increase them. The reason was obvious: the engines did not concentrate their effect on one point; they surrounded the column of fire with a circle of separate jets, and the water was immediately turned into steam, and the dissociated gases added fuel to the flames.

Raymond ran off to the head-engineer. In a few words he showed him that the only way to master the fire was to collect all the hoses on the roof of a reservoir about twenty meters away from the one on fire, and then to unite all the jets in one stream and play into the very heart of the flames.

The engineer hesitated. Not that the idea did not seem reasonable; but the ascent of a reservoir already hot and filled with petroleum, at so small a distance from the fire, was not particularly tempting.

Raymond listened to nothing but his courage,—

“Come, my lads, we must save the town!” he said, without hesitation seizing one of the nozzles, and dragging it towards the iron ladder leading to the place he had pointed out.

His example electrified every one. The firemen rushed after him, scaling like cats the reservoir which was to serve as the platform of their battery. Twenty jets were gathered there in less than three minutes, and suddenly quite a waterspout opened on the flames.

They writhed, shot up again, spread, roared, whistled, protested, and were conquered. Resistance was impossible under such a continuous flood. In a few minutes all was over, the fire out, the peril vanished. Clouds of smoke and steam floating over the reservoirs, were the only witnesses to the danger with which the town had been menaced.

Raymond came down, and received quite an ovation from the crowd, who had witnessed his bravery. He quickly got away from the noisy manifestations, taking Cassoulet with him to change his clothes, which were literally streaming with water.

As they passed the two telegraph offices they noticed that they were crowded, as happened every time anything connected with petroleum occurred at Drill Pit. The least accident had so marked an effect in prices that all the newspapers and speculators in Pennsylvania had correspondents on the spot to send them instant intimation of what was happening. The news of the fire, which might appreciably reduce the "existences" in petroleum, and send the price up, had been already telegraphed to all quarters. Now they were announcing the end of the conflagration, and the bearers of the messages were in such numbers that they formed quite a crowd at each window.

This circumstance vividly struck the inventive mind of Raymond Frézols,—

"A travelling telegraph office, like the military telegraph,

would have done well to-day if it was anywhere near the fire." And immediately he added, "It is surprising that no one has thought of it, in this country where the telegraph is free, and where the centre of public interest is continually shifting. Sometimes it is a well they are boring, the news of which every exchange is expecting; sometimes it is a well that has given out; sometimes one that has increased tenfold in its yield." Here he suddenly interrupted himself to exclaim, "Why should not I start a travelling telegraph office? It would not cost very much!"

As he changed his clothes he thought over the idea, and the more he thought over it the better he liked it. As soon as he was dressed he went to a sort of general store, kept by a little man as round as a ball and extraordinarily active, who was familiarly known as Short Joe.

"I want a Morse apparatus," said Raymond.

"A Morse apparatus? To open sardine-boxes?" asked Short Joe, whose studies in physics had not advanced very far.

Raymond could not help laughing.

"You are out of it this time! I mean a telegraphic apparatus you will have to get from New York or Philadelphia."

"An instrument like the Lightning Company use?" asked Joe, quite unabashed. "I might get you one from them. They had a dozen down last week."

"It would save time if they could lend me one."

"All right ; I'll manage it !"

"And at the same time ask them what rate they will pay me for any messages I send them from a travelling office in the neighbourhood."

"A travelling office you are going to start ? But," said Joe, "the Company will only allow you a discount on the ordinary rate."

"Are you sure ?"

"I am quite sure. That is always the way they work."

"In that case we must have a line. Have you any wire ?"

"All sizes and qualities. I have some insulated wire that will save your having posts. Ten cents a yard," said Joe, who knew how to count, if he was not strong in physics.

"I will take three hundred yards. Now I want a good-sized vehicle, a brake, for instance, or a light roomy cart."

"Ah !" sighed Joe, "I have not yet got any carriages in my store ; but if you will come with me to Tommy Duncan, the wheelwright, we might find something that would suit you."

They went to Tommy Duncan, and Raymond had hardly entered the yard when he caught sight of an old yellow coach, bearing the inscription, "Harrisburg and Bear Creek."

"How much for that coach?" he asked.

"Oh, you can have that cheap!" said the wheelwright. "I have had it two years—ever since the railroad opened. It is old Davis's coach. Did you know him?"

"No. But that does not matter. How much is it!"

"Eighty dollars."

"Done!"

Raymond gave his instructions to the wheelwright as to the alterations he wished made in the inside, and then went off to a jobmaster, from whom he hired two horses. Meanwhile Short Joe went off to the telegraph company and obtained a Morse apparatus, and Cassoulet went to the hotel for the luggage that had been left there.

That evening the coach was in position a few yards from Grafton Well, which was then exciting much public interest. Next morning the two friends proceeded to arrange the line in communication with the nearest telegraph depôt; and at noon the new telegraph office was opened for business.

Raymond had reckoned with reason on the numerous correspondents who every day required news of the wells; but he had never dared to hope for such a success as he obtained. All the town went to the travelling office as if to a wonder, and many people sent off telegrams for the pleasure of inaugurating it. The Americans are passionately fond of petty industrial innovations in which they

see distinctive marks of their peculiar genius. They are even inclined to exaggerate their importance, and turn the least molehills into mountains, provided there are molehills in the United States.

This appeared clearly enough next morning in the *Drill Pit Herald*. This journal of politics and literature, of which the editor was at the same time compositor and printer, devoted a leading article in his most flaming style to Raymond's modest invention.

If we were to believe the ingenious author of this literary effusion, America alone was capable of producing an idea at once so simple and practical ; and in America this glory was reserved for Drill Pit. A useless old coach, a wire, a Morse instrument, those were the elements. The Old World would have left them for ever in their usual places, without ever thinking of putting in a coach anything but passengers and parcels, or putting the Morse in anything but a telegraph depôt. But young America had more imagination ; its children were not such as sank in the quicksands of routine. A young man had arisen who had put to entirely new uses this superannuated machine. And this young man, almost a child, was a hero, a modest hero, who had just saved Drill Pit from certain destruction—from a catastrophe to which that of Babylon, &c., &c.

Then followed highly fantastic details of the biography

of Raymond Frézols ; his manner of life, the colour of his hair, and the way in which he ate boiled eggs, without omitting the address of his tailor, "our esteemed fellow-citizen, Mr. Joseph Drayton, familiarly known as Short Joe among his numerous friends, and whose sumptuous magazine at No. 24, Broadwalk, continues to attract a most fashionable connection." The article terminated by a paragraph highly eulogistic of Cassoulet, who had suddenly become "a young engineer of the highest merit, who, tired of seeking a path in the darkness of old Europe, had found it under the dazzling rays of the American sun."

This dithyrambic was cut up into short lengths, according to the rules of Yankee art, by cross headings, of which the following are specimens :—

ADMIRABLE DISCOVERY.

A NEW APPLICATION OF THE TELEGRAPH.

MORSE, EDISON, AND COWPER SURPASSED.

NEW YORK COMPLETELY OUTDONE.

DRILL PIT THE INTELLECTUAL CAPITAL OF THE
UNION.

DAVIS'S COACH : WHAT A MAN OF GENIUS DOES
WITH IT.

A CIVIC HERO : SUBLIME DEVOTION.

THE WATER AND THE FIRE : THE STRIFE OF THE
ELEMENTS.

THE VICTORY.

THE LIGHTNING REDUCED TO SERVITUDE.

MR. RAYMOND FRÉZOLS.

UNPUBLISHED BIOGRAPHY OF A MAN OF TO-DAY!

AND TO-MORROW!

A DEVOTED DISCIPLE: MR. CASSOULET.

Among the assiduous readers of the *Drill Pit Herald* was Ebenezer Curtiss. Every morning he never failed to read the local sheet as he ate the ham and eggs which composed his invariable breakfast. On this occasion his attention was attracted by the large capitals in which he saw the name of Raymond Frézols, and he wondered where he had seen the name before.

Almost immediately he remembered; it was on the visiting card of the young man who had come to him the day before to tell him of "a new fortune."

"Eh! eh!" said Ebenezer. "It seems that the lad is not an imbecile! His idea of a travelling telegraph office is really a good one, and might be developed. Who knows if I was not wrong to send him to the right-about? Perhaps he had really something serious to propose? He spoke to me in these very words:—The day when you are tired of losing on change the produce of your wells, and it suits you to triple their yield, remember that I know the way, and that I alone can tell you!—on condition that I have not already placed it elsewhere. Those were his words. They have at least the merit of being clear and to

the point. Why did I not listen to him? What possessed me to show him out?"

Such were Ebenezer's thoughts as he finished his ham and eggs. How many men of business he had heard of who had invented nothing, and yet made a profit out of the ideas of others? And his regrets turned easily to remorse at having let slip a favourable opportunity.

The result of these reflections was that Ebenezer Curtis felt the want of a little walk after his breakfast; that he suddenly thought of sending a message to his correspondent at Chicago, and that instead of taking it to the first telegraph office he came to, he directed his steps towards the Grafton Well.

CHAPTER VI.

RAYMOND'S IDEA.

CASSOULET had his nose at one of the windows of the old Harrisburg coach. Suddenly he said to Raymond, who was reading, leaning on his elbows, at the little deal table:

"Mr. Ebenezer Curtiss is coming this way."

"Ebenezer Curtiss?" said Raymond. "Oh! oh! Can it be possible that my words have already borne fruit, and that he is curious to know what I have to tell him as to the means of making a fortune?"

Almost immediately there was a knock at the window, and Cassoulet took in a message signed "Curtiss."

"Twenty-eight cents," he said.

"Here is a dollar. Take it out of that and keep the change, my boy!" said Ebenezer. "Is Mr. Frézols at home?" he continued most graciously.

With a glance, Cassoulet asked Raymond, who answered in the same way.

"M. Frézols cannot be seen just now," said Cassoulet majestically.

"Will you tell him Mr. Curtiss wants to speak with

him? He might give me a couple of minutes?" said Ebenezer, whose curiosity increased with the resistance.

Raymond had a great mind to say that he was not at home to any one, as the petroleum king had said to him, but his natural generosity saved him from the passing temptation, and he opened the little door and appeared.

"I want to talk about that matter you brought to me," said Ebenezer. "You will, I am sure, excuse the rudeness of my reception when I tell you you found me losing three millions of dollars owing to a confounded panic."

There was such a straightforward frankness in the avowal that Raymond was disarmed. He jumped to the ground and stepped up to the petroleum king.

"Well," said he, "let us talk about it now, if you like."

"You have a proposition concerning some industrial project?"

"A project that will bring over the oil industry a sudden and profound change to the advantage of those who have the sense to understand it and bring it about," said the young man, fixing his deep, clear eyes on his interlocutor.

Ebenezer nodded to show he was waiting for more.

"This is my idea," said Raymond. "I am going to talk to you frankly; you are an honest man, incapable of using it without me, if you adopt it."

The petroleum king did not frown.

"Have you heard that the Russians propose to bring to

Moscow, by a subterranean tube, their oil from Baku, on the Caspian Sea?"

"Have I not heard of it? It was that cursed news which cost me three millions of dollars!"

"The Russians are in that only copying the United States and imitating the network of subterranean pipes which brings to New York and Philadelphia all the oil from Pennsylvania. I need not tell you what a revolution the establishment of that network has brought about in the industry of this country. At first, you will remember, they simply put the oil in barrels into carts. Then came the era of railroads and cistern trucks with a valve for the admission of the oil and a tap for draining it off. But the difficulty was to bring the oil to the trucks. That originated the idea of having pipes communicating between the railway stations and the oil reservoirs. The first of these pipes was established in 1865 between the wells then open and the station at Miller's Farm. Then it came to be said that instead of bringing the oil to the station to be put on the rail it would be simpler to take the pipe along all the way to New York. And so there was gradually developed the network of subterranean pipes with which Pennsylvania is covered, and by which its mineral oil flows to the coast to be spread abroad over the world."

"Things happened so," said Ebenezer. "I had not come to Drill Pit when the first pipes were laid; but in the

seven years or more I have been here I have seen them lay miles of them."

"Well," said Raymond, "do you think that the last word is said about this mode of transport so expeditious and so convenient, and that we are to remain where we are?"

"I don't quite see how you can improve on the system. Is it not as convenient as it can be? We proprietors have nothing to do but to see that our petroleum comes out of the pump to fill our reservoirs. When the reservoirs are full, or nearly so, the agent of the Transit Company arrives, gauges our holders, gives us a receipt for the quantity, and turns a key. Immediately our oil enters the pipes of the company and flows into the company's reservoirs, where we can leave it forty-five days without paying warehouse charges. After that we pay half a dollar a thousand barrels a day. We have the receipt and can sell our oil and deliver it in New York or Philadelphia, or anywhere else, providing the company has a depôt at the place. That seems simple enough? Can we wish for a more perfect system?"

"No; not when you are dealing with New York or Philadelphia, or any other American town served by the company's pipes; but when you are dealing with France or England, or Europe or China, what do you do?"

"Naturally we put the oil in tanks or barrels and

ship them at New York and send them to their destination."

"Exactly. That is the point. You are still, as regards sea transport, in the very infancy of the art. As you did before 1865, to send petroleum to Philadelphia, you put it in casks and send it across the sea. The boats have replaced the old carts!"

"Quite so! But how will you cross the Atlantic if not in steamships or sailing-ships? Are we to take it by balloons?"

"Not at all, but simply in a *pipe* such as you already use in the United States. As it is, it has been found possible and convenient in America to send it through a network of subterranean pipes, why do you not *send it to Europe through a submarine tube?*"

Ebenezer remained silent for a moment quite astounded.

"Why not? Why not?" he asked, rubbing his ear. "I really do not know! Probably because no one has thought of it, that is all. New York was not built in a day, as they say. Besides you speak at your ease of a pipe under the Atlantic. Do you think it would be easy to manage it?"

"Easy, I know not! Possible, I am sure. The huge subterranean network you see to-day working around us is enough to prove it. If it has been realized, this network, notwithstanding all the obstacles that might have

arrested its development in this heterogeneous and much-divided ground, how much easier would it be to put a simple pipe—one only—through that homogeneous and common property, the ocean! Do you see the incalculable consequences which such an improvement in the mode of transport would have on the industry of Pennsylvania?"

"Do I see them?" said Ebenezer, stamping on the ground, his eyes ablaze, and his hands clenched, in a paroxysm of irresistible enthusiasm, "when it would finish this Russian business at a blow! They would be in a fine fix, Messrs. Nobel Brothers, of Baku, with their pipe and their tank-steamers! It would take them all their time to dispute the market with us at Havre or Liverpool! A submarine tube flooding Europe with our oil! That would be the most considerable industrial and commercial achievement of the century! An export which now runs into millions of barrels would then run into millions! The Russians would have something to do then, and so would the gas companies and the electric-light people! Do you know, young man, we could then deliver oil in Europe at less than a cent a quart? Do you know that?" asked Ebenezer, who, in his enthusiasm, had seized Raymond by the shoulder and dug his nails into his flesh.

"I do not doubt it!" said the young Frenchman, with a smile. "And that is exactly what I had to tell you—flood Europe with oil by means of a submarine tube."

Ebenezer suddenly returned to earth. Enthusiasm had given place to doubt.

"But see here! Is it possible, or is it only a dream?" he continued, with a look already clouded with anxiety at him who had made the novel proposition.

"Not only is the thing practicable, but I think it easily realizable," said Raymond Frézols. "You will find it quite simple, I have no doubt, if you examine it coolly. It is enough to say that the subterranean network of the Transit Company is of itself twelve hundred times larger than the tube of which I speak; to consider that no one in the world, no authority, no interest, private or international, can stop us in our enterprise; and that instead of laboriously digging trenches for the pipes and covering them in again, we have only to go right ahead under water."

"That is true," said Ebenezer, still uneasy. "And I am as anxious as you to discover reasons for being confident. But, you know, in such cases the fact alone is decisive!"

"Assuredly. And we shall come to the fact, and that before very long, I promise you. But as we are only at the theory, let us suppose we were in the year of grace 1864, and that not a subterranean pipe had been laid in Pennsylvania. Then, suppose that I had come to you and had just proposed to establish a network of pipes like you

see working now. Do you think you would be in a humour to believe my plan realizable?"

"Very probably not; no one would have believed ten years ago that the pipes would spread so and do so much service."

"And twenty years ago no one would have believed the thing was practicable. Remember the opposition there was, the ill-will and ridicule it met with, the violence of the carriers and porters in hindering the laying of the tubes. Well, what I submit to you is simpler, and not so new as the project of 1864. It is only to extend to the sea what has already been done on the land."

"Agreed. But how?"

"I will show you when you like, and that by experiment."

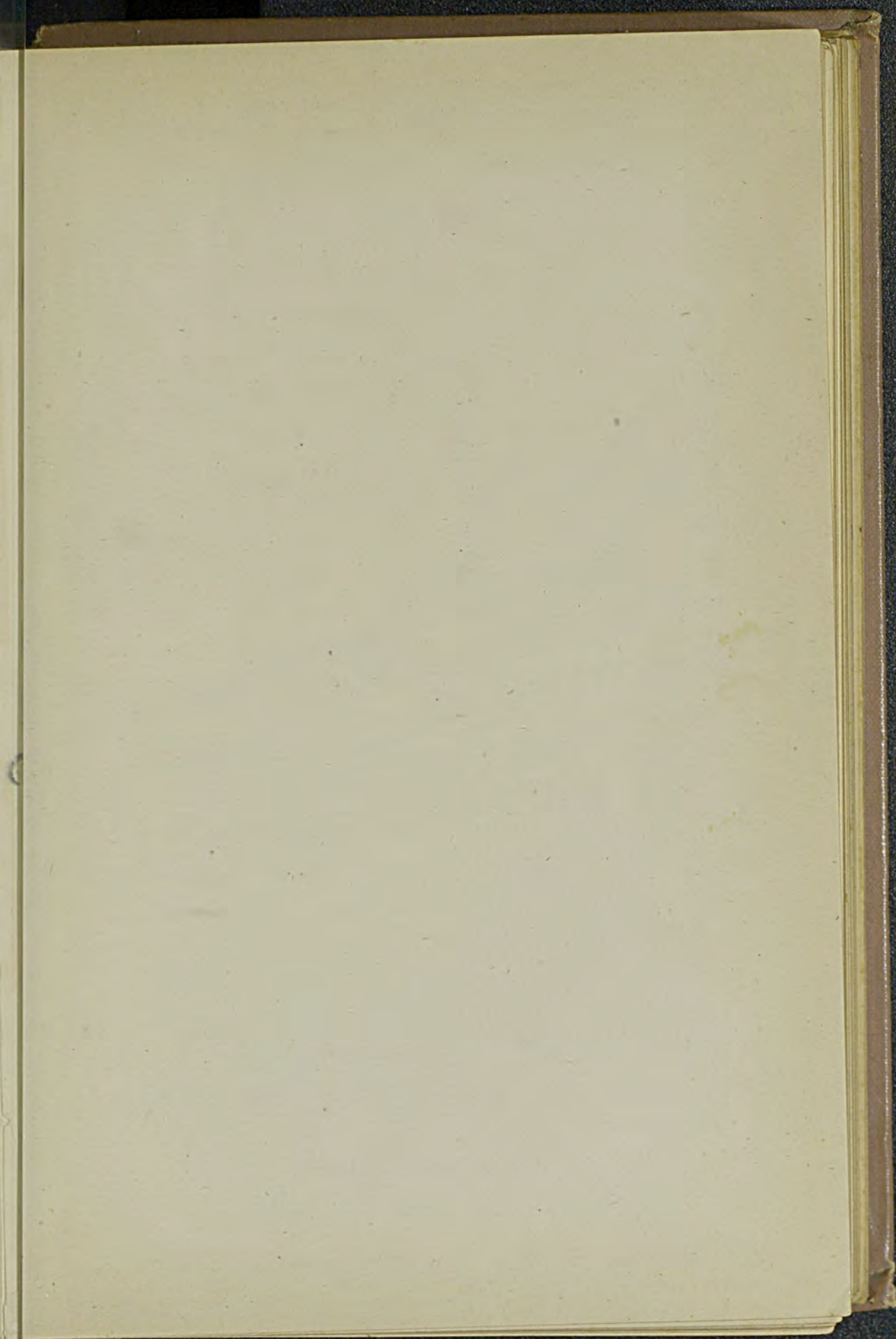
"This very day?"

"This very day, if you like; but I would rather it were to-morrow. I have preparations to make. I want a steam launch, a clay mould, and several simple tools."

"The steam launch is found. There is the *Topsy-Turvy*, which belongs to me, and which I put at your disposal. Take your time, and when you are ready let me know. If you show me that the thing can be done, I answer that it will be done, or my name is not Ebenezer Curtiss."

"That is agreed?"

"It is agreed."





The pipe he fixed in position

"Well, Mr. Curtiss, at two o'clock to-morrow be at Bennett's Wharf. If you keep your word, as I am sure I shall keep mine, the transatlantic tube is made."

Next morning, at the hour named, Ebenezer Curtiss arrived at the rendezvous. Raymond was waiting for him, accompanied by Cassoulet, in the steam launch, which had a stove on board. Before this stove were piled several packets of brown paper and a few rolls of gutta-percha.

"We will first get out into the lake," said the young Frenchman when the petroleum king was seated in the stern. "When we are in the open water, I will show you my system."

In less than a quarter of an hour they had reached the lake, and a few minutes afterwards they were far enough out in it to begin operations.

Raymond set to work to improve the fire, then he put on it a casting ladle, into which he had thrown some pieces of gutta-percha. Then on the top he put a cap pierced with a lateral orifice, into which a bent pipe could be fitted. The pipe he fixed in position, and it passed out aft, just over the screw and under the arm of Ebenezer, who sat a silent spectator of the preparations.

"This arrangement," said Raymond, "represents our floating workshop, in which the submarine tube is made, and from which it is veered out as fast as it comes from the mould, represented by this curved pipe. We shall

have to study with care the weight, the thickness, and even the composition of this submarine tube. For the present, let us suppose it is made of a strong metal spiral, which would be light, strong, and capable of being strengthened by being covered with gutta-percha. The segments of the metal tube would arrive ready made on board the ship, and steamers could bring up fresh supplies as required. These segments could be joined on to each other in the mould itself, where they could be covered with gutta-percha in such a way as to emerge from it as a continuous tube, still supple, so as to be dealt with as if it were a cable, and be shut off at once if the state of the sea necessitates a suspension of the works. In that case, the end cut off is abandoned to the sea, but firmly attached to a colossal buoy, in such a way as to be easily removed as soon as operations begin again."

"I understand," said Ebenezer. "At the moment of immersion the tube is only half-solidified, so that it can be treated as if it were a rope; the bath into which it is plunged immediately completes its solidification. You can stop working by closing the tube, and leaving it afloat, and pick it up when you like. That is it, is it not?"

"Exactly."

"But what will become of the tube when it gets into the sea? Is it to remain on the bottom, and follow its irregularities, or rather, like an electric cable, stretch from

submarine peak to submarine peak across the ravines like a foot-bridge. I am afraid that if so it will have to have a resistance incompatible with the necessary suppleness and size."

"The objection would be perfectly just if the tube were to behave like a telegraph cable, and follow the ocean-bed. But such is not the case. For many reasons, the first of which is to reduce the length and cost of the tube as much as possible, I hope to keep it in a straight line, and to do that I must float it."

"Float it on the surface?"

"Oh, no. It would be exposed to many risks, let alone the protests from the maritime nations at the creation of this new kind of reef. Our tube will be sixty meters under water. In that way it will injure no one, and have nothing to fear from the keels of the ships, nor the storms, which at the depth do not even agitate the water."

"But how will you hold it in suspension?"

"By submarine floats twelve meters apart, adapted to its weight, and mass, and load, and the density of the medium in which it hangs. It is a simple matter of hydrostatic calculation."

"You think it is possible?"

"Look at the proof!"

Raymond undid one of his brown paper parcels, and took out a piece of indiarubber tubing some five or six

meters long, closed at both ends, and weighted with lead, which Short Joe had procured for him that morning. Metal balls were fastened on by string at equal distances along the tube, like little captive balloons.

The young Frenchman threw the affair into the water. Immediately the tube sank to sixty centimeters it remained suspended, and quite motionless.

"Suppose my tube to be of sufficient strength, length, and calibre," he continued, "suppose the floats to be proportionate to its dimensions, substitute sixty meters of sea-water for sixty centimeters of fresh,—and there is our transatlantic pipe!"

Ebenezer remained silent, but was evidently struck with the simplicity of the demonstration.

"Physical laws are always the same," said Raymond. "What happens to a small tube like this will happen to a monster tube, such as we think of constructing. Make the experiment in a gold-fish bowl, or in the Atlantic, the essential conditions remain the same. We shall want more gutta-percha, more floats, more money, in a word, and that is all. But it is only a question of money."

"Oh!" said Ebenezer, clenching his fists, with an air of fierce resolution. "Money shall not fail you! At least, unless it takes millions!" he added, giving Raymond a look in which could be read his fear lest the dream could not be realized.

"Milliards? No!" said the young man. "But millions a few. Five or six millions of dollars, according to all appearance."

"That can be found," said Ebenezer with a sigh of relief; "and I will see to it. Show me the use of this apparatus."

And he pointed to the ladle on the fire.

"That is the beginning of our floating workshop," said Raymond. "Here is a tube formed by a spiral spring, which I place in the mould, thus. Under the action of heat, the gutta-percha in fusion flows along the spring, and becomes part of it. You have only to draw out over the stern of the launch the tube thus treated, and as you immerse it you will see it solidify in the very place where it ought to remain. See, it begins to come out—"

And drawn by very simple mechanism—a string wound round a tiny winch—the gutta-percha cylinder appeared at the end of the bent pipe, gradually grew longer, touched the water, and began to sink. At the end of twenty minutes it was two meters long. Cassoulet fastened on the metal floats, and finally the tube, cut off by a blow from a hatchet, remained suspended a few centimeters under water in the place where it had fallen.

Ebenezer appeared as satisfied with the result as Raymond himself.

"The demonstration seems complete enough," he said.

"But I am curious to see it tried on a larger tube, and in company with one of my friends, Jacob Freeman, my cashier. Could you arrange that?"

"Any day you like to name."

"We will arrange it together. Do me the pleasure of dining with me this evening."

The invitation was accepted, and preparations were made to return to the town. But the launch had moved off some distance, and it took a little time to find the two tubes where they had been immersed.

"Another time I will take care to mark the place with a cork buoy, so as to forget nothing of what we shall have to do at sea," said Raymond.

But it was found simpler in the next experiment to operate in the bed of Yellow River; and this led to the capture of Peter Murphy in the very act of espionage.

CHAPTER VII.

AN OLD SEA-WOLF.

BUT at the same time, a strange spy was this Peter Murphy! Much on account of pity, a little on account of curiosity, and also by the effect of an instinctive impulse which he could not explain to himself, Raymond had given him some food, after giving him the presentable clothes, and had since kept him under surveillance. His wish was to study this living enigma, and ascertain if it were really on behalf of Timothy Campbell that the albino was watching his experiments. Peter Murphy had greatly facilitated the inquiry by attaching himself, like a poor stray dog, to the travelling dwelling, where he found so good a welcome. Without asking permission, he had made a bed of dry leaves between the wheels of the old coach, and under the roof formed by its body he had slept all night, nay, even during the day, rolled in an old blanket that had been abandoned to him. At meal-times he did not ask for anything, but accepted with simplicity and devoured with eagerness all that Cassoulet offered him at

Raymond's orders. In return for this hospitality he rendered a few light services, such as taking a telegram to its address, fetching water and doing other domestic work, all as if he were a child of four years old, or rather a well-trained spaniel; like a machine, as it were, and without showing the least initiative.

His intelligence was so feeble that he could scarcely understand the simplest question and answer it; and when it exceptionally happened that he did so, it was because the question had the rare fortune of awaking for an instant a faculty of attention almost extinct. But Peter Murphy was not, properly speaking, an idiot; he seemed by flashes still capable of formulating or understanding elementary reasoning. A watchmaker would have said of him that his mainspring no longer worked. But by a strange anomaly, instinct survived with the functions of organic life after the wreck of his intelligence, and he had a kind of physical need to spy about and hide in corners, looking at people or listening to what they said without always understanding it.

The workmen of Grafton Well soon remarked this peculiarity of their new neighbour. After being disturbed about it for a day or two, they amused themselves at it, and soon accorded the poor imbecile that sort of gentle respect which people have for the weak-minded.

"Simpleton as he is," they would say, with a shake of

the head, "there is no one like him for telling what the weather will be to-morrow, for recognizing a man at five hundred yards, or for seeing what others do not see !"

Raymond, who had made similar observations, soon ceased to persuade himself that Peter Murphy was a conscious spy. He saw in him rather a kind of biped hunting-dog, or detective by instinct, and wondered if it would be possible to make use of this curious propensity by making Peter Murphy a spy on those who sought to spy on him.

The poor creature had very rapidly conceived a boundless veneration for his benefactor. Gratitude at least was not extinct in him. Not only had he loved Raymond from the first with the affection of a faithful dog, but his name possessed for him a singular fascination. He occasionally spent hours repeating it like a chorus—"Raymond Frézols !—Raymond Frézols !—Raymond Frézols !"

But it was chiefly Cassoulet whom he greatly loved. His abruptness seemed to him to be gentleness, and he seemed to find a real pleasure in being outwitted by him ; a pleasure which the young rascal was only too glad to accord him, particularly when he surprised him behind some bush or paling in the very act of keeping a benevolent watch on him.

"What are you doing there, you brute ?" he would say, giving him a shake without the least respect. "Still

spying on the people at the wells! It is a fine trade! Will you tell me what you think will happen to you if you go on at this rate?"

Peter Murphy would smile stupidly, but make no reply.

"You must be a ninny!" the other would continue. "Do you know you will get yourself disliked, going on in that way, and that one of these days some one may fetch you a nasty knock? Not if I am there, though, for I should not advise any one to maltreat you in my presence!" Cassoulet would add, with a trace of generous emotion. "But I might not arrive in time to help you. Do you understand that?"

And Peter Murphy did not understand. But he evidently felt the goodwill which this rudeness hid, and the satisfaction it gave him was often shown by his visible efforts to show himself unreserved by communicating some detail of his past life.

"When I was a sailor," he said once, without finishing a probably vague thought.

"You a sailor!" exclaimed Cassoulet. "You are not sharp enough for that yet, poor Peter! A fresh-water sailor you might be, but nothing more!"

But the albino vehemently protested against the imputation, and as Cassoulet persisted in doubting his nautical exploits, the desire to convince his friend gave him speech for a moment.

"Look here, my little Cassoulet," he explained with extraordinary volubility, "I look a fool I know, but I was not always like that, I assure you. Peter Murphy—I am Peter Murphy—was a nice young fellow at your age! Your portrait, in fact; just like you."

"Thank you for the compliment," said the other with a laugh.

"But Peter Murphy has seen many things! Peter Murphy has had much trouble!" added the albino, as if the thought had already escaped him.

"When you were—a sailor?" asked Cassoulet with a pause of incredulity.

"Certainly."

"In what service? The Government marine?"

"In the marine—the maritime marine."

"Pheugh! And what nationality was your marine?"

"What nationality? My own, then! I was a Frenchman in those days," said Peter Murphy, lowering his tone, winking his eye, and shaking his head mysteriously.

And Cassoulet listened attentively for some new detail, but by this time the albino was off to the land of dreams, and, fixing his eyes on the ground, had nothing more to talk about. He had finished for the day.

Another time he referred to his old sailing trade, and mentioned a name which caused Raymond Frézols to start with surprise. It was that of the *Belle Irma*, the ship his

father commanded. Suddenly interested by this fragment of conversation, he approached the two speakers, seated on the ground a few yards in front of him, and stepping up to Murphy, who was nodding his head like a crockery mandarin, he asked,—

“What did you say about the *Belle Irma*?”

Peter Murphy made no reply. His face had resumed the expression of stupor which was habitual to it.

“Look here!” said Raymond Frézols, shaking him by the arm. “Repeat what you have just said! You have served on board a ship called the *Belle Irma*?”

Not a word. Peter Murphy had relapsed into his mutism. There was no chance of getting anything out of him.

Raymond went away with regret, although it seemed unlikely that the poor creature would know anything very interesting about the *Belle Irma*; but he specially recommended Cassoulet to lead the conversation to the same point as often as he could.

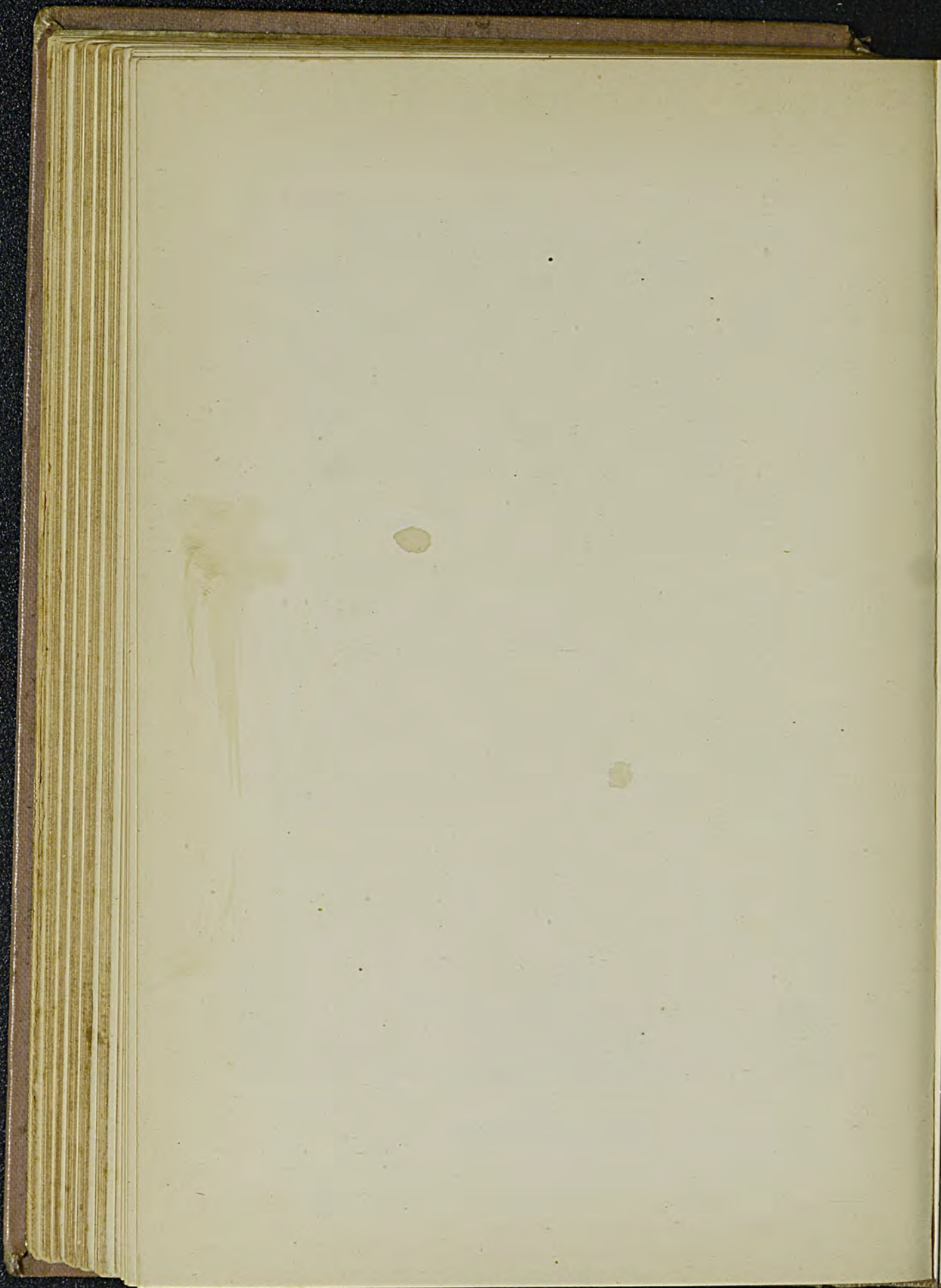
This incident, by adding a thread the more, slender though it might be, to the attachment between Peter Murphy and Raymond, in some way consolidated matters and the undecided position the poor fellow occupied in the travelling office. But other things happened for Raymond to think about.

After two entire days devoted to his wife and daughter,



“What did you say about the *Belle Irma*?”

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Ebenezer Curtiss expressed a desire to resume the great project begun with Raymond, and showed himself more and more interested in it. Councils were held, long lines of figures were written, estimates were drawn up.

Raymond occupied himself with the technical side of the enterprise, the one most interesting in his eyes. Ebenezer looked at it from the financial side. He had soon convinced himself that the submarine tube, if it could be made, would necessarily be a splendid affair either in monopolizing the oil trade with Europe, or in reducing the cost of freight to a minimum.

"The export of mineral oil," he said, "is as much as six hundred million gallons. Supposing we deliver the oil in Europe at the same price as at New York, plus two cents a gallon, no one could oppose us, and we have a safe return of sixteen millions a year. Supposing the trade is left free, and we deduct the same duty for cost of transport, the result is the same. Then, supposing that the consumption of oil in the old world does not increase after the laying of the tube—a very unlikely supposition—we shall draw a revenue of a million francs. It is consequently a goldmine, if the tube costs for establishment and maintenance less than the fortieth or fiftieth of the said milliard."

At which Ebenezer rubbed his hands, and, seeing millions piled on millions, dreamed of a fortune more colossal than those of Vanderbilt, Jay Gould, and Mackay put

together ; he beheld himself the richest man in the United States, and even the richest man in the world. And that, after all, was the only ambition he encouraged.

He who had opened out to him such prospects was worthy of being introduced to his wife and his daughter Madge. He invited him to dinner the Tuesday following at his own house. The arrangements were of the simplest, for Curtiss Villa was but an outpost, which the petroleum king inhabited for three-quarters of the year, but as a bachelor, as it is called—his mansion being at New York. Two maids and a negro valet were his only servants ; while his mansion in Fifth Avenue boasted of a French cook from the best restaurant in the United States, a steward, a butler, a dozen valets, and quite a legion of stable-boys—as he reminded you complacently, too complacently perhaps, every time he had a chance.

But, in reality, Ebenezer Curtiss preferred living in his modest villa at Drill Pit to all the mansions in the world. He felt himself more in his element, farther from the critical observation of those "rascally lackeys," who always looked at him as though they did not think he was good enough, as he said between his teeth.

Like all the merchant princes of his country, the petroleum king had begun in a very humble way. Without going farther back than fifteen years, we should have known him as running a steam saw-mill in a western

village. There he had met the lady who was now Mrs. Curtiss. Miss Prudence Smith, as she was then called, was animated by a devouring ambition, happily associated with a keen sense of the practical. She had insisted on her husband taking lessons in arithmetic and commercial correspondence ; and she herself, who could hardly write her name, also set to work, and five or six years after, when Ebenezer bought a brickfield at Omaha, Prudence was his book-keeper. It was owing to his wife's strict economy and spirit of order that Ebenezer was able to buy the extensive tracts of land at Drill Pit, and carry on the boring operations which put him in the front rank of Pennsylvanian magnates. And it pleased him to talk of Prudence's abilities, and publicly render her homage.

"Without my good wife, I should not be where I am," he often said. "It was she who first saw the importance of petroleum wells, and made me buy the best lots at Drill Pit."

Up to the time that Ebenezer's affairs had acquired their present extent, Prudence had been initiated into all the secrets of her husband. But during the last two or three years the cares of completing her daughter's education, and the new ambition of taking a place in the fashionable world, had kept her almost constantly at New York.

Madge, her only child, had grown with her father's fortune, and her education in many ways reflected the

phases of that fortune. After receiving the first rudiments in a primary school of the village, under the direction of Jacob Freeman, who had been Ebenezer's teacher until he became his cashier, she had become a pupil in a boarding-school at Omaha. When she was thirteen she had been sent to the school kept by the Misses Pattison, the most fashionable school in New York, with express orders to outdo all her companions in luxury. This was Ebenezer's particular desire, as he saw in the luxury the proof of his increasing fortune. Not content with requiring his daughter to send to Paris for her gowns and hats, he frequently visited the fashionable shops to give Madge what he found most expensive in laces, in silks, and even in diamonds.

It was in vain to attempt to make Ebenezer understand that good taste forbade jewellery to children of thirteen.

"Good!" he would say triumphantly; "that is what the poor say. What are laces and gems made for if not for those who can buy them? I wish they cost more for Madge to have them."

The effect of this strange conception of elegance, so very prevalent among men of the Ebenezer class, was that Madge, with her gowns of satin early in the morning, and with rings on all her fingers, would have been ridiculous in any other circumstances. But she was so naturally

graceful that this costume, befitting a princess or Spanish madonna, seemed invented especially for her, and among her companions no one found fault with her, except perhaps to envy her a little.

From this time forward she had a reputation for beauty, which was confirmed by the unanimous vote of the world when she came out into it. New York society is, as a rule, not very exclusive, and asks little more from those it welcomes than that they should live in great style. Madge was charming, and would be the heiress of the richest man in Pennsylvania. That was enough to open every door to her. Her schoolfellows also helped her. She was always popular with them, and her most intimate friend, Alice Cooper, the daughter of a rich Wall Street banker, undertook to bring her out. The fortune of the Coopers was twenty years old; they had therefore socially the advantage of the Curtisses, and could patronize them. They even gave a grand entertainment in honour of Alice and Madge.

This first dinner in town was a memorable event in the annals of the Curtiss family. What anxieties, what hesitations and discussions to decide the delicate matter of what was most becoming. Mr. Curtiss voted for the frock coat, and Madge for the swallow-tail. Was a white cravat necessary or not? Ought he to arrive with gloves on, and carry his hat about till dinner-time, or ought he to

leave it in the hall? These were serious problems; even acute ones! Mrs. Curtiss, who was always practical, ended by buying a "Manual for the Dinner-party," in which the question of costume was fortunately treated at length. Ebenezer learnt with astonishment that it was advisable to avoid as much as possible eating with the point of the knife, using the fork as a toothpick, or rinsing out the mouth in drinking. The author of the precious manual inveighed against the Yankee habit of expectorating everywhere, and suggested that it was not desirable to whistle at table. These ideas rather troubled the innocent conscience of Ebenezer, and he set out in misery in his eight-sprunged carriage.

But everything went well; no one troubled about the achievements of the petroleum king with his fork, and Madge's beauty secured a triumphant success.

From this success dated a new life for Mrs. Curtiss and her daughter, in dinners, balls, excursions on horseback and in carriages, and seasons at Saratoga. With the suppleness of their sex they soon took the tone of their new surroundings, and Madge acted her part to perfection. No one had better horses than she had, or more elegant dresses, or such a crowd of admirers. Her parents allowed her all the liberty that America allows to such girls. She profited by it, or abused it, to lead all the young men she danced even a quadrille with to suppose they were sure

of her hand, and managed to retire from her promises with equal facility.

They said at Drill Pit (there are wicked tongues everywhere) that she had begun this game at eleven years old, by announcing to her parents, then brickmakers at Omaha, that she was engaged to Tom Strutt, her neighbour and schoolfellow. Tom had soon to give place to another suitor, and ever since Madge's list of engagements had increased so considerably that she alone could reckon it up. But it is not certain if this were true; at any rate, it was what gossip said.

Raymond had heard of these things, like every one else in the country where the petroleum king was a person of distinction. And he felt rather uneasy at being asked to dinner in such brilliant company. He had gone to the universal Short Joe for appropriate garb for the occasion. And Short Joe, who was an animated gazette, had shaken his head, and told him that he would rather dine with the Queen of Sheba than Madge Curtiss.

What was the meaning of this sibylline utterance? Impossible to say. But the terror which such a view inspired in advance was such, that on arriving at the villa Raymond was much more excited than he cared to admit.

CHAPTER VIII.

ON YELLOW RIVER.

THE first impression was reassuring. Mrs. Curtiss was a rotund little woman with an intelligent and pleasant face. She gave Raymond a cordial welcome.

"I know the good opinion my husband has of you, Mr. Frézols," she said, holding out her hand to the young man. "Pray consider our house as your own, either here or at New York."

"Papa tells us you have given him the best idea in the world, and we are very curious to know the details," said the fresh, musical voice at his side, of a fair girl who was embroidering slippers near the window, and looked so simple and quiet in her grey cloth gown that Raymond had some difficulty at first in recognizing the radiant apparition of the day before yesterday.

Was that Miss Curtiss, the fashionable belle and accomplished coquette? In truth she did not much resemble her portraits! In all his life Raymond had never met with such a prepossessing manner. From the first he felt himself at

his ease, as if with a twenty years' acquaintance, and at the request of the ladies, who had heard of his curious dwelling-place, he related the history of the old coach.

The account pleased Madge mightily. She declared that she must really make the acquaintance of Cassoulet and Peter Murphy.

"And not later than to-morrow," she added, "I will come down expressly to send a telegram from Grafton."

At this moment Ebenezer arrived with Jacob Freeman. There were to be no other guests; the dinner was to be a select one. They could talk without restraint of the great project, and on this ground Raymond was always in form. He was a Frenchman; he had a lively and agreeable way of expressing his thoughts which in no way resembled the conversation of the young imbeciles who habitually sucked the handles of their canes in the presence of Miss Curtiss. She listened to him with most flattering interest.

Since her arrival at Drill Pit she had gained such an increase of wisdom as had surprised even herself. The sight of her father's office, of the gigantic reservoirs of petroleum, of the derricks furiously at work, of the panting machinery, of all the laborious hive; and then the simplicity of Curtiss Villa, had exercised a sudden influence on her impressionable and mobile nature. Almost without a thought she had adopted a costume not only in harmony with her surroundings, but with thoughts and feelings she

had never had at New York. For instance, she had begun to read a volume of the grave historian Parkman, found in an old cupboard, and had commenced to work her father a pair of slippers, two phenomena which would much have astonished Alice Cooper and her other friends if they had witnessed them.

Madge remained for an instant astonished. But, doubtless on account of the novelty of the impression and the change, she found it had its charms, and she took pleasure in it, and entered fully into the spirit of her part.

Was it to follow it out thoroughly that she showed herself so gracious to Raymond? Perhaps. For never at New York, and in her usual circle, had she ever condescended to exchange four words with a young man whose trade was the transmission of telegrams, and who lived in an old coach. To tell the truth, she would never have admitted the possibility of his being introduced to her.

But at Drill Pit it was different. The introduction was made. The fancy of the moment was for the domestic virtues, and Madge could persuade herself in all good faith that in taking an interest in Raymond's project she was only conforming with her father's wishes.

Whatever might be the cause, the conversation during the evening was so familiar and cordial, Madge showed herself so gracious, and Raymond was so inspired, that he parted well content with himself and the others, and

thinking that neither in the old nor the new world had he ever met anybody comparable with Miss Curtiss.

She had asked to go on the river next day with her father, to see with her own eyes the famous tube of which she had heard so much at the table and in the drawing-room. Was not this the most delicate compliment to the skill of the young inventor? He took it to be so, at any rate, and he made no effort to check himself in giving himself entirely over to her who had thought of him so kindly.

The slanders afloat at Drill Pit regarding Miss Curtiss provided him with other motives for constituting himself her chevalier. Had ever such atrocious calumnies been invented against so perfect a creature? Madge a coquette! Indeed! You only had to see her to scatter all the slandering tales concerning her to the winds.

Such imputations seemed to Raymond to be simply blasphemous; and he began to consider if it would not be desirable to go next morning and tear out the tongues, or at least the ears, of those who spread such infamies.

But as he was not the brother of Miss Curtiss, or related to her in any way whatever, he did not exactly see what right he had to interfere. But if the day came when he had the least right to constitute himself her defender these people would see!

And what right? Well, that of her betrothed. After all, what was there so very extraordinary in that? Ebenezer

was hugely rich, it is true, and Raymond had perhaps not a hundred dollars in his purse. But was he not about to bring off an industrial and commercial masterpiece which would necessarily make his fortune? He had only to carry the enterprise through successfully; and everything seemed to show that he would do so. Ebenezer saw its importance; Jacob Freeman, who was the most influential man of the house, had said that for his part he could not see any plausible objection. Miss Curtiss declared she was enthusiastic over the project; her mother even declared it splendid. If all went well, Raymond Frézols would tomorrow be a man of importance, rich and famous, and the distance which separated him from Madge would be effaced. Here was a motive added to all the others to work for a complete success, to study the affair in its smallest details and to make no mistake.

It was in cherishing such hopes and dreams that Raymond fell asleep in the old coach.

Next morning, long before the time appointed, he was with Cassoulet and Peter Murphy on board the steam launch, preparing for the projected excursion, when, to his extreme surprise, Madge arrived alone.

"My father told me to ask you to excuse him. It is impossible for him to come with us," said she, stepping on to the wharf. "You will let me come all the same?" she added, with a smile.

Let her come? Raymond was transported with joy as he gave her his hand to help her on board, and sit under the awning astern. So happy, indeed, that he could not find words to say so.

"I am sure you are quite scandalized at seeing me come all alone," said Madge, with her eyes half-closed, under her large red sunshade, when the *Topsy-Turvy* was under way. "In France, as in Spain and Turkey, girls never go out except with a *duenna*, do they?"

"I am not in the least scandalized," said Raymond with great solemnity. "Each nation has its customs, which have generally a reason for their existence, and it is not at this moment that I should complain of American liberty."

"Then you do not think it is indispensable for a girl to walk with her eyes cast down and her elbows at her side, under the guard of a person of mature age, relative or not? Indeed, such a state of things does not suit me!"

"Perhaps it is not quite so strict as you imagine?" said Raymond, laughing.

"There! You see, you are defending it! I suppose you hold the extremest view of French prejudices, and suppose that parents and notaries are more competent than the girls in choosing a husband?"

"I confess I have hardly studied the question. But at first sight I do not see anything extraordinary in respecting the rights and opinions of the family in an affair of such

great importance. The parents, and even the notaries, have more experience in the world than a girl just out of boarding-school, and are they not habitually better judges of a candidate's merit?"

"Of his financial merit, perhaps," said Madge, in a tone of contemptuous irony. "But money is not everything in this world!"

"Quite so!" said Raymond warmly. "I took care to say nothing about that. Do not, I pray, credit me with feelings which are not mine. After all, do you think there are more mercenary marriages in France than in the United States?"

"I do not know. All I can say is that the idea of not choosing the companion of my life for myself is profoundly distasteful to me."

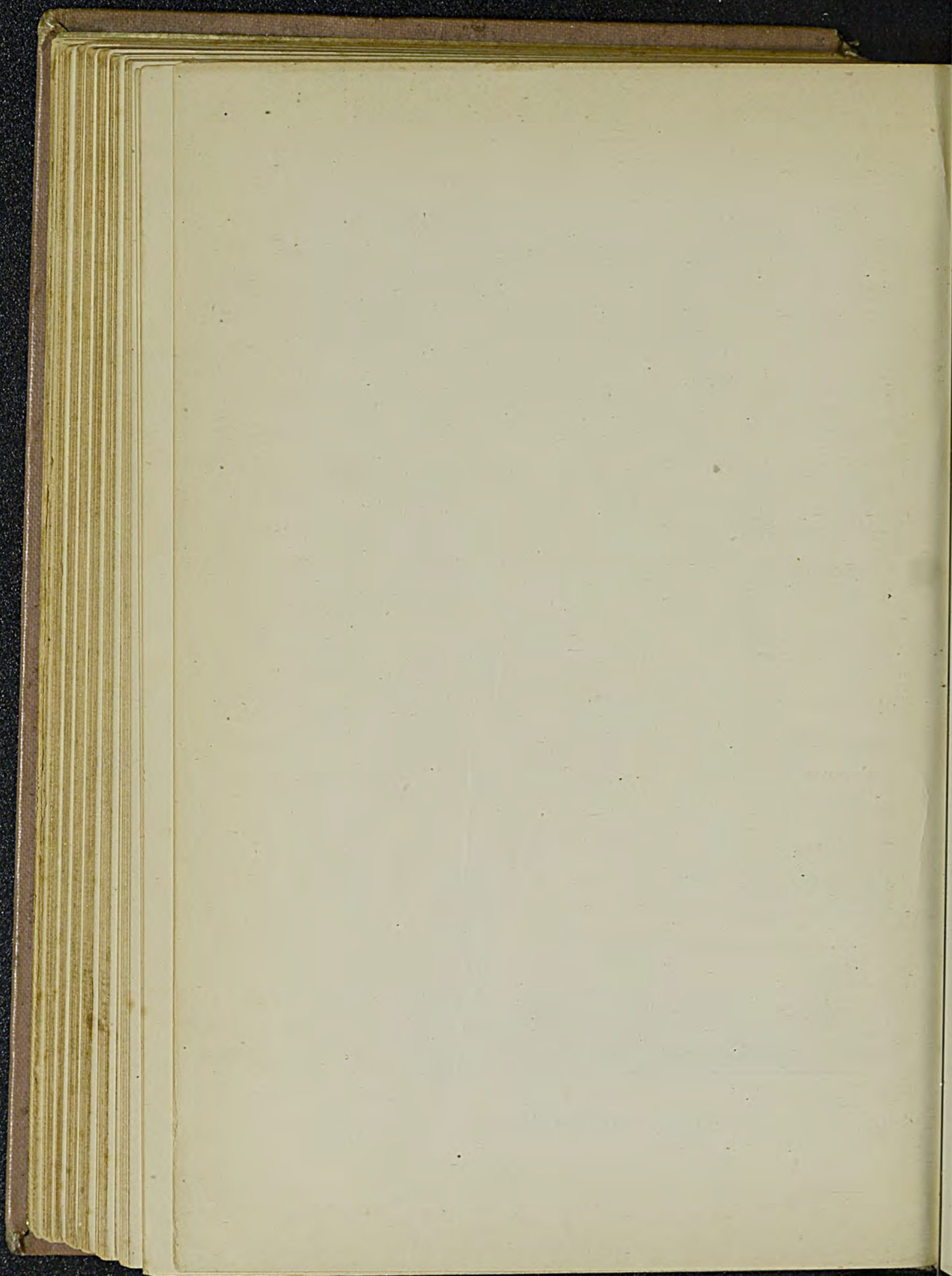
"It all depends on the system of education adopted in the United States. Here the boys and girls have the same schools, the same masters, the same course of studies, sit on the same benches, and are accustomed from the earliest years to be playfellows. It is natural that they can understand each other, and form opinions as to each other's merits; while in France, where their school-life is kept so separate, the ability to do so is very exceptional."

"Thank you," said Madge. "You have given me the key to a custom which had always appeared to me in-



"Money is not everything in this world."

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comprehensible. You will, however, allow me to prefer our system to yours. I—”

She stopped as if she were about to touch on her own experiences, and had suddenly remembered that her friendship with Raymond was of too recent a date to authorize such confidence. For a few minutes she looked in silence at the water that was gliding along the side of the steam launch. And then suddenly she remarked,—

“It seems to me that we are rather forgetting the particular object of our trip. You promised to explain to me your system of submarine transport. Do you not intend to keep your promise?”

Raymond hastened to satisfy her, and put together the different pieces of his experimental apparatus. But, as frequently happens, the reality appeared less interesting than the anticipation. The grand project of a submarine tube crossing the Atlantic to Europe had fascinated Miss Curtiss's imagination. The sight of a gutta-percha pipe hung on to six floats did not seem quite so remarkable. She did not remember that one was the germ of the other, that everything in nature is a matter of proportion, and that the grandeur of an idea is not to be measured by centimeters. She had hardly given a glance at the demonstration when she brought back the conversation to a more personal basis by asking Raymond how he had acquired a taste for mechanical inventions.

He replied that it was probably due to the variety of his studies ; and, as she asked him for instances and details, he told her of his life of labour, and travel, and inquiry. Two or three times during his account he had mentioned the name of Cassoulet. Madge asked to see him, and when he was brought to her, blushing, and turning an old straw hat about in his hands, she begged Raymond to introduce her to his friend Murphy.

In short, when the steam launch was coming back up Yellow River, on her return to Drill Pit, Madge could fancy that she knew Raymond Frézols as well as she knew herself. Probably not to be behindhand, she decided to complete the confidence which an hour before she had checked on her lips.

"Perhaps you have heard that I became engaged rather too soon?" she said, with the imperturbable frankness that distinguished her. "People even say I have been engaged a dozen times. It is not true. I have been engaged three times. You perhaps think that is too often according to your French ideas. But put yourself in my place. Six or seven years ago my father owned a small brickfield at Omaha. The son of one of our neighbours and friends, my schoolfellow, Tom Strutt, asked me to be his wife as soon as he was in an independent position. I liked him, and I was sure that the marriage would please both families ; and I accepted him. But at the end of a few months

I saw I never could be happy with Tom. He had become an idler and a gambler. I learnt that he drank, like many other young men in this country, and that he was often tipsy. Could I marry a drunkard? I told him clearly he must give up his bad habits or give up me. The warning had no effect, and I broke the engagement off. Was I wrong?"

"Certainly not," said Raymond.

"Two years later we were here, and my father had begun the works at Williams well. A young friend of ours, Frank Davis, did me the honour to seek me in marriage. He was an honest lad in every sense of the word—good, hard-working, and wise. I felt a sincere affection for him, based on esteem. But, warned by my previous experience, I refused to be formally engaged to him. It was agreed that when I left school we would talk over the matter, and I would give him a definite answer. I knew people considered we were engaged, perhaps because Frank Davis allowed them to think so. And I was almost of the same way of thinking; but three years later, when I returned from New York, the marriage appeared to me impossible. I had new ideas of the world; my habits and tastes were no longer those of Frank Davis. With his rough miner's manners, he seemed to me nothing but a peasant. The idea of marrying him, if I had ever had it, was now far from me. I had to tell him so in plain

terms, and the poor lad took it so to heart that he left the country. There was a good deal of talk about this, and as my father had become rich in the course of these three years, people did not forget to say that I had broken with Frank on account of this wealth. Could I explain that it had no influence in my decision? No one here would have understood my motives, if I had thought fit to state them."

"Perhaps they would have been thought more offensive to Drill Pit than the current hypothesis," said Raymond, who was listening with great interest to this unexpected confession.

"You are not far wrong. The petroleum merchants would have seen in them but an insult to their society. And I did not wish to insult the oil interest, I can assure you. I did not forget that my father sold it, that it was the source of his luxury, and that I never had a notion of blushing for it, that it was not my fault that I had left Drill Pit for a New York boarding-school, that I had adopted the views and manners that had been taught me, and that I was no longer in harmony with the natives of Pennsylvania. Perhaps you think it singular, Mr. Frézols, that I am telling you these tales. They recurred to my memory just as I was crossing the town. I was explaining to myself for the first time what I had hitherto been unconscious of. I understood why the idea of marrying

Frank Davis was repulsive to me, and why petroleum had never pardoned the breaking off of the engagement. Then came my third engagement. He was a New York stock-broker, and belonged to one of the oldest families in the Union, the Wierzungs, people who were descended from the first Dutch Colonists, whom we call the Knickerbockers, our Faubourg Saint-Germain. They form a little world of themselves, an aristocracy all the more exclusive as they do not underrate its quality. Perhaps the idea of entering it with flying colours made me agree too easily to the suit of Samuel Wierzung. Personally he was a nice fellow. The misfortune was that he did not confine himself on 'Change to buying and selling for his clients; he speculated on his own account, and became liable for two or three millions of dollars. My dowry, it appeared, would pay this off, when my father, warned in time, cut short this brilliant operation by informing him that I could not marry for two years. Next day the bankruptcy of Samuel Wierzung was announced, and he left New York. That is the story of my three engagements."

"The last proves that the intervention of the family is of some use, even in America," said Raymond.

"In a consulting sense, yes; but not in a guiding sense," said Madge, rising, as the *Topsy Turvy* ran alongside the wharf. "I am going away without having time to visit

your travelling office," she added. "My mother and I am off this evening."

At the moment Raymond offered his hand to Miss Curtiss to help her step ashore, he saw on the wharf a grey-haired man in a black frock coat buttoned up to the chin, and wearing a broad-brimmed Quaker hat. His face was pale; his lips were thin. His eyes were black and piercing, and deeply sunk. He seemed very gloomy, and gave the *Topsy Turvy* such an evil look that Raymond, who caught the glance, was quite frozen by it for a moment. If he had believed in the influence of the evil eye, he would have thought a curse had been placed on his plans. Madge followed the direction of his eyes, and said, speaking of the stranger,—

"Do you know him? That is Timothy Campbell, my father's enemy. If a look could stab us, we should be all dead by this time, should we not?"

She accompanied the words with a laugh so frank and clear that all evil influences were apparently put to flight.

Almost at the same instant Peter Murphy, who had heard what she said, brandished his fist, and exclaimed,—

"Wait! I will throw him into the river!"

He was about to run after Timothy Campbell, when Raymond stopped him.

"Peter, will you do me the favour of being quiet? What do you mean by it? In what civilized country do you

throw people into the water? I did not know you were so savage."

And in fact there was a strange contrast between the poor albino's feeble body and his homicidal projects.

"Be contented to watch, Timothy Campbell," said Madge, addressing Peter; "and if you find him going to do anything evil, tell Mr. Frézols."

After having graciously shaken hands with the young inventor, she departed, without attaching any importance to the incident. But two hours later, Short Joe, in person, arrived at the travelling office with clothes and dainties, which Miss Curtiss had sent for Peter Murphy. For Cassoulet there was a superb pair of boots, precisely such as he would have chosen if he had been asked to confess his most secret wish. It can be judged what a welcome Short Joe received. He had been highly flattered by the visit Miss Curtiss had honoured him with, and in his expression of satisfaction, he gave a variant of his usual formula.

"I should not have been more gratified if the Queen of Sheba had given me an order!"

Raymond, although he gave no sign of his feelings, was none the less delighted with his morning's excursion. Madge had spoken to him like a friend; she had taken him into her confidence. Assuredly he might believe that

she was not indifferent to him. And the thought filled him with intense happiness.

He even plucked up courage to go that evening to the railway station—or *depôt* as it is called in America—to see the travellers off. Mrs. Curtiss seemed pleased at the mark of attention, and Madge thanked him in appropriate terms. Ebenezer asked him to call at his office next morning but one, to confer regarding the great project.

Raymond was punctual at the appointment, as may be imagined. The petroleum king informed him that he was quite disposed in principle to adopt the submarine tube, on condition that it was pronounced possible by competent engineers. The first thing to do, therefore, was to consult them; then there would be practical details to work out, contracts to be entered into, and the means to be got together in men, money, and materials. All this required that they should go to New York. Ebenezer therefore proposed to Raymond that they should form a preliminary partnership, to which one would bring his idea, and the other a first investment of twenty thousand dollars. One of the partners would be director, and the other secretary. They would set out for New York and take up their quarters there, and proceed to the study of the ways and means. If in a year the affair had not been settled, each partner would resume his liberty of action.

Raymond accepted all the arrangements without demur.

The necessary document having been prepared and signed, it only remained to dispose of the telegraph business. It sold so well that there was no regret at abandoning it. Short Joe found a young clerk who took over the travelling office. With him was left Peter Murphy, who at no price would abandon Drill Pit. Since Miss Curtiss had entrusted him with spying on Timothy Campbell, he regarded himself as invested with a sacred mandate.

CHAPTER IX.

FIFTH AVENUE.

WHEN he arrived at New York, Raymond learned that Mrs. Curtiss and her daughter had gone to Saratoga, the fashionable watering-place. Ebenezer had asked him to put up at his mansion in Fifth Avenue. But the young inventor, who prided himself on his independence, had thought fit to decline the invitation, and take up his lodgings with Cassoulet at a quiet hotel. He congratulated himself on his determination when he went for the first time to knock at the door of Curtiss House, and saw what a princely establishment he, with his small portmanteau and humble companion, had escaped.

The house was a large one, built of red bricks, surmounted by slate roofs and pierced with windows, having wrought-iron balconies, and it formed the corner of a quadrilateral or block of sumptuous buildings in the best street of New York. The door was in bronze, and was copied from that of the Baptistery at Florence. This magnificent entrance gave access to a vestibule of marble

surmounted by a cupola of rough glass and leading to four ornamental staircases. Round the hall at every floor were galleries of carved wood on to which the rooms opened. The staircases, like the hall itself, reminded one in their general decoration of that of the Opera House at Paris: they were built of similar materials, and ornamented with similar statues and candelabra.

When Ebenezer built the house, he had given his architect a free hand, with directions to make it as beautiful and expensive as possible. After the architect came the furnishers, who had received similar instructions. The result of their combined efforts was, if it occasionally left something to be desired in the matter of good taste, at least to realize by its overwhelming opulence the dream of the proprietor. Gold and silk, art bronzes, staring fabrics, and oriental carpets, formed on every side a frame for medallions in mosaic of the Ebenezer Curtiss monogram. On the benches half a dozen gigantic flunkies in a livery of red and peach bloom sprawled their well-fed calves in rose-coloured stockings.

"What a poor personage I should have been here!" thought Raymond, smiling at the luxury while his name was sent up to the petroleum king.

In a few moments a valet came with the message that his master would see Mr. Frézols immediately, and at once ed the way towards the staircase on the right. On reaching

the first floor, the young Frenchman followed his guide across an immense library, then through a picture-gallery still larger, in which on frames of gold figured the names of the best contemporary French artists—Troyon, Corot, Meissonier, etc. Were the pictures genuine? That it would be too venturesome to affirm, and Ebenezer himself would have been the last to be able to prove it. All he could say and prove was that he had paid for them handsomely. A picture-gallery was essential in his eyes as being a proof of opulence. And the pictures were placed in it according to the price he had given for them. The dearest occupied the place of honour—at least unless the dimensions of the frame rendered this order of precedence impossible. In one instance Ebenezer had heroically cut down the sky of a Titian which would have run up too high into the ceiling. He gave a very cordial reception to Raymond, whom he had not seen for a week, and told him at once that the report of the engineers consulted regarding the enterprise was favourable. Not only did they think a tube could be laid, but they thought the work would be easy on the young inventor's plan.

"On this point," says the petroleum king, "there is not the shadow of a doubt. Our project has nothing Utopian about it, and two large firms have already applied for the contract. But although we have the approval of the engineers, I must say that, generally speaking, we have

not the approval of the financiers. They agree in pronouncing the speculation a risky one, and say they will not invest a dollar in it. But it matters little, I tell you, if I do it all by myself, for I have always gone on the principle of sharing neither expenses nor profits if possible, and I have always come out well. When I bored the Williams well, for instance, how many times was I at my last few dollars, and hardly knowing which way to turn to pay my workmen? They used to come to me and propose to take shares in the business. But I held out, and refused. I would rather have sold my wife's wedding ring. I would rather have lost everything, and struck the oil alone, than sold for a few hundred dollars that which was worth millions. I will do the same with our tube, and I will do it alone on one condition, that it costs no more than you say, and takes no longer to get to work."

"I can answer that!" interrupted Raymond. "I have been working all the week," he added, taking a note-book from his pocket, and placing it under Ebenezer's eyes. "Here are the figures which will prove I was right. I have consulted the most competent specialists, visited several of the great factories, and studied their capacity, and I can now repeat my promise after full knowledge of the conditions. The tube will cost complete and in position, four millions of dollars, or five altogether, including the reservoirs at the points of departure and

arrival. If I had to-morrow the needful funds, with the right of signing the contracts, I should be able to get the oil through the Atlantic in a year."

"In a year!" said Ebenezer. "That seems almost impossible, considering the time it takes to lay even a cable."

"This is quite a different matter. The procedure would be as follows. I would give out the construction of the segments of the tube to several French and American houses so as to get it delivered with the required rapidity. An office for the receipt and embarkation of stores would be established at New York, another one at Brest, for it is between these two points that we would establish the submarine communication, for reasons I do not think it necessary just now to explain. Twenty steamers, each with a floating workshop, would receive their cargoes of kilometers of tube, and lay them on the line marked out on the chart. You know that our segments of metal tube, coated with gutta-percha, at the moment of immersion, can be closed and left adrift in the sea, electric buoys marking their position, and making their re-capture easy. When the time came to join them, nothing can be easier. Twenty ships paying out a kilometer of tube a day, would lay 6000 kilometers in 300 working days. Allow sixty-five days or delays or bad weather, and you have been exactly a year. But we can increase the number of floating workshops, and

bring them up for instance to forty, so as to take advantage of the summer season and fine days. We could even work at night; we could pay out two or three kilometers of tube every twenty-four hours; we could get the American and French contractors to work together; we could offer a premium to those who were beforehand in their deliveries. And the total length of the tube will be less than 6000 kilometers. For it to be ready at the time stated, and for the petroleum to flow through the Atlantic in a year, we only require the will to do it."

"And we have the will! I will!" said Ebenezer, vigorously shaking his young partner's hand. "My dear Frézols, you give me confidence! But the tube to cost only four millions of dollars will surely be very small?"

"Small! certainly not! What would be the use of putting through the Atlantic a tube that would only yield a few quarts a minute? It must be proportionate to the export of oil, and even for the expected export of oil. Our object is to substitute a new method of transport for the old one, and to render the old one obsolete. It is necessary, therefore, that our tube should yield at least twelve or thirteen hundred thousand gallons a day. For that a calibre of eighty centimeters is indispensable, and it is on this interior diameter that depend the calculations as to price. Look here!"

And Raymond laid before Ebenezer the estimates furnished by five of the best firms in New York.

"I have taken the mean as the base," he added, "and this mean gives us 3500 francs as the price of each kilometer of tube. But you know better than I do, that it will certainly be possible to obtain a considerable reduction by treating at the same time with French and American houses, or even with English ones for large orders. We may thus reasonably hope for an abatement in price."

In face of these explanations and proofs positive, it seemed that the affair took body, as it were; and Ebenezer saw it already under way.

"It must be ready in a year! It must really!" he said, walking about in a state of agitation. "The question of capital does not stop the way if four or five millions of dollars will do. I had reckoned it would take at least eight or ten, and I confess I was prepared to risk six, for in such an enterprise we must allow for the unforeseen."

"For six millions of dollars," said Raymond, with great seriousness, "I will undertake to add to the submarine tube its natural and almost indispensable complement an electric cable suspended to our floats."

"An electric cable!" exclaimed the petroleum king, pricking up his ears, "that is an idea, and a famous one! Hung to the floats, it could be lighter and necessarily shorter than those laid on the ocean bed and following its

irregularities. It would cost less, and could do business at lower rates. The other cables would be drowned and done for! Do you know, my dear Frézols, that you have the happiest inspirations, and are worth your weight in gold?"

"Nothing more natural! When we have our line of floats we should be muffs not to use them. The electric cable would inform us instantaneously of what is passing at both ends of the tube; and, as you have just said, we shall be able to take messages at a reduced price from the public."

At this theme, so familiar and grateful to the two speakers, that of the great project of which their heads were full, the conversation lengthened out to lunch-time. When the butler announced the meal, Raymond accepted Ebenezer's invitation with joy, and passed with him into the dining-room.

It was as splendid as the rest of the house, and the service was worthy of the frame. Silver plate, gold plate, powdered servants behind each chair — nothing was wanting; had they not been alone, Raymond might have thought he was at a state dinner. Ebenezer considered this sort of thing compulsory when he was at New York, and condemned himself to submit to it, much to his secret mortification. He dared not tell his French cook that he preferred to all his sauces the beans and bacon he was accustomed to at Drill Pit. Madge had told him once for

all that beans and bacon were a horribly vulgar dish, and very bad form indeed.

Scarcely had the repast been hurried through, than they resumed their talk on the great project, going this time into details. Raymond explained how he proposed to construct his tube formed of a spiral metal framework and a cylinder of gutta-percha in such a way as to remain supple, notwithstanding its large calibre, and behave like a huge rope while being laid. He suggested the possibility of obtaining at a low price the enormous amount of gutta-percha by dealing direct with French merchants established on the Congo. And, in short, he fully entered into the plans he had thought out.

The tube was to start from New York and end at Brest, and at a later day it was to be carried on into Pennsylvania at one end, and Paris at the other. At the outset two maritime stations were preferable, as there was an object in supplanting the existing methods of transport across the Atlantic.

"New York," continued Raymond, "is already the great centre for petroleum on the coast of the United States. It is natural to take it as the beginning of our tube, and natural also to form a corresponding general centre on the coast of Europe. This arrival basin ought to be established on one of the countries nearest to America. I had at first thought of Ireland, but Ireland is an island, and an island

in the extreme north-west of Europe which would make the problem more complicated. For landing on the old continent, there happens to be a convenient quay, no other than Finisterre, the beautiful promontory of Brittany, which stretches out towards America like a friendly hand. In the neighbourhood of Brest we shall easily find some valley which we can transform into an artificial lake of petroleum, and use as a reservoir. There we can load ships for Liverpool, London, Havre, Bordeaux, Hamburg, Marseilles—until the time comes that a network of pipes, like that in Pennsylvania, radiate from a centre to all the markets of Europe, and inundate the whole of the old world with our petroleum."

"Including Russia," interrupted Ebenezer, "which we shall reach before the tube from Baku."

"Including Russia according to all experience. But if we leave it out of the question, the western nations will afford us a sufficiently large connection. The day we place petroleum on the Breton coast, at the same price as at the mouth of the wells, applications will become so numerous, that we shall probably be obliged, to satisfy all demands, to lay two or three tubes parallel to the first."

Ebenezer remained silent, and seemed to be weighing in his mind all the bearings of the plan. He finished by explaining what he had in his head.

"I will tell you what bothers me," he said, "it is that we shall be working as much for others as for ourselves if we start from New York. On your plan, all the oil we pass into Europe through our tube will come through the Transit Company, who are the centres of the present subterranean delivery. It will, therefore, get a profit on all the carriage, and it is not at the Pennsylvania price, but at the New York price we shall deliver on the Brittany coast. I should like to do away with this intermediate cost, and supply the consumer direct from the well."

"Nothing can be simpler," said the young Frenchman. "It is only a matter of supplementary capital. You have only to establish at Drill Pit a general depôt of petroleum, and put this into communication with New York by a subterranean conduit of the same dimensions as the transatlantic tube, and then you will have direct communication between Pennsylvania and Brest."

The general plan having been sketched out, the next step was to arrange what share of the work each should take.

Ebenezer reserved for himself the financial department, the arranging of the payments, and the organization of the general depôt at Drill Pit. Raymond was to sign the contracts, select the sites, engage the necessary staff, and direct the constructive side of the enterprise.

Two offices corresponding to this division of labour were

opened, one at Far Rockaway, one of the maritime suburbs of New York, for technical experiments, the other in Broadway, close to Curtiss House, for monetary transactions. So as to have everything under his immediate supervision, Raymond took up his quarters with Cassoulet in his office itself, and thenceforward began a life of constant work, of interminable conferences with engineers and contractors, of minute verifications of surveys, and of rapid journeyings between Far Rockaway and the centre of New York and Brooklyn.

For about a month he was up to the eyes in work, thinking of nothing else, possessed of the one fixed idea, like all true artists and inventors, when one morning, before the opening of this office, he had occasion to call on Ebenezer at Curtiss House.

In his working dress—jacket and straw hat, without gloves—with the air of a soldier on a storming party, he had just hurried up the marble steps, and was entering the vestibule, when he found himself face to face with Madge, who had arrived the evening before.

She was in her riding-habit, with a little black hat, and pearl-grey gloves, and whip in hand. At her feet was a young man, also equipped for the morning ride, busily occupied in fixing a silver spur on her elegant boot. But at that moment Raymond saw only her.

Delighted to see her at last, and thinking himself legiti-

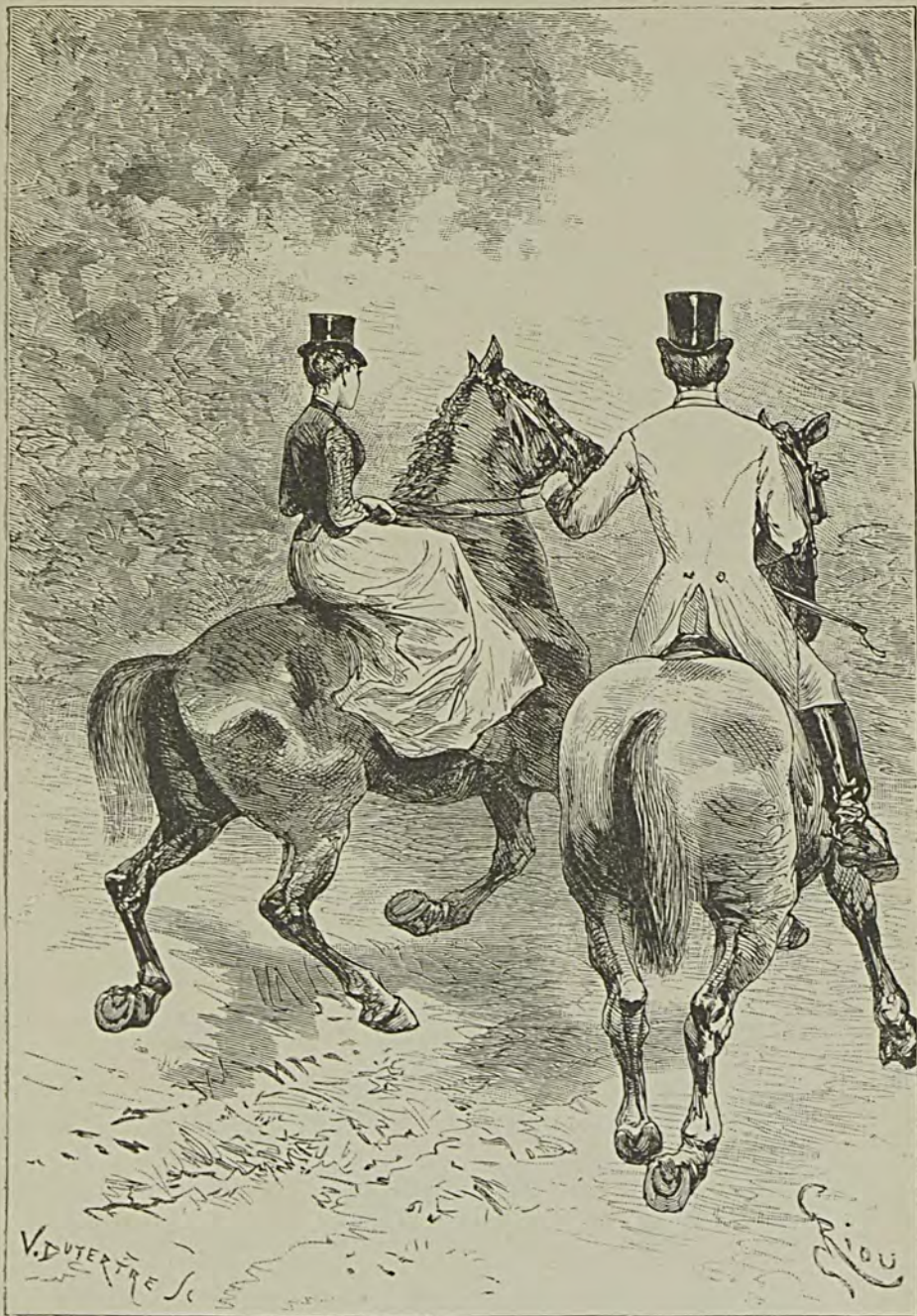
mately authorized by the confidence she had shown him at Drill Pit, and by his association with Ebenezer, to treat her as a friend, he removed his hat instantly, and, with a smile on his lips, advanced towards her, and held out his hand.

He was about to cordially express the pleasure he felt at seeing her back in good health, when Madge gave him a distant, if not hostile, glance, and nailed him to the pavement, if we may so express it, by a glacial salute, and then seemed suddenly absorbed in the tenth button of her glove.

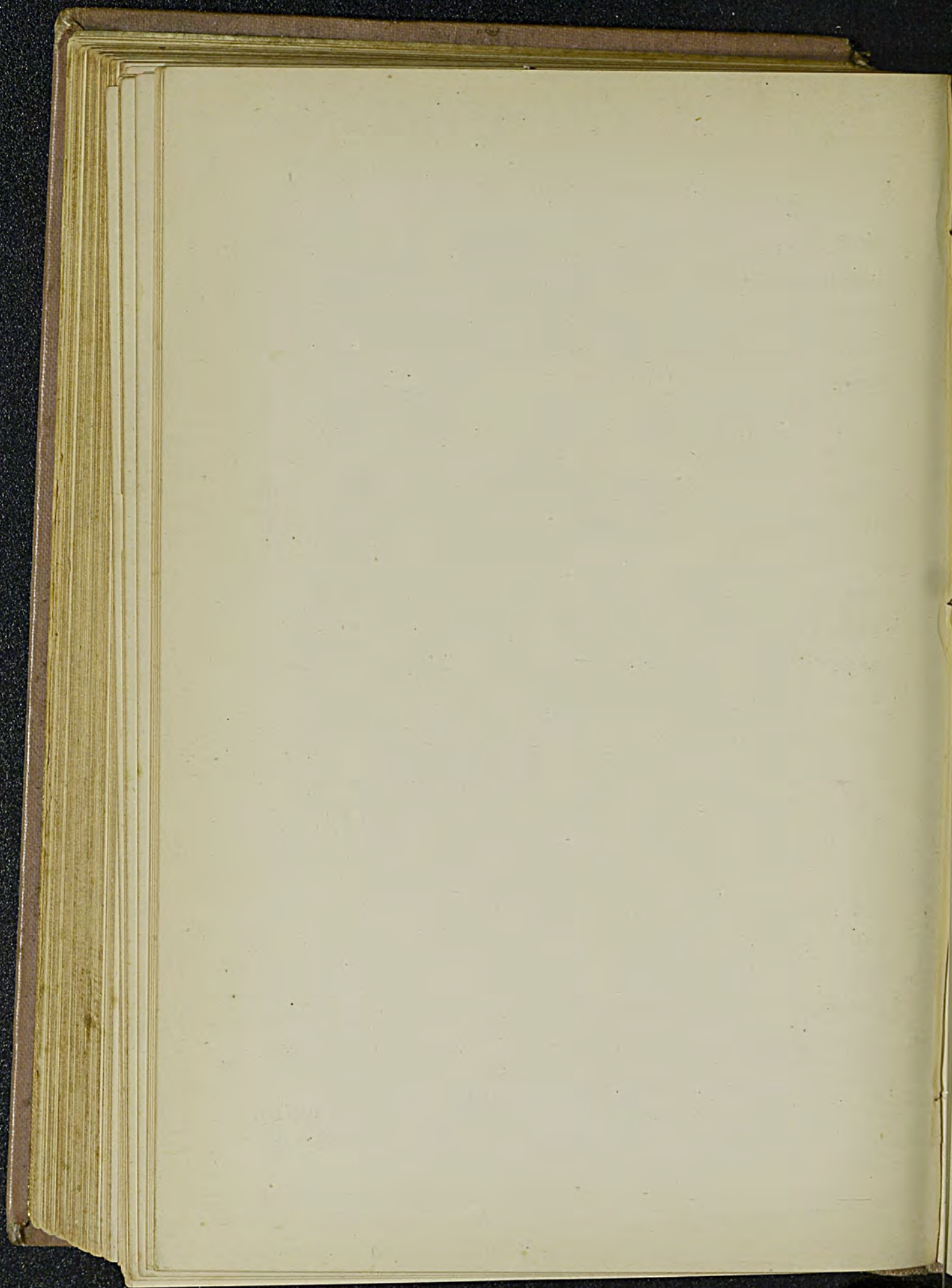
At the same instant there was heard outside the pattering of the hoofs of the horses that the grooms were bringing to the steps.

Madge's spur was fixed, doubtless, for she stepped towards the door. Her companion followed her, and adroitly lifted her into the saddle. Then he mounted, and they set off at full trot, followed at thirty yards by a faultlessly-liveried groom.

All this did not last a minute. But in that brief interval Raymond experienced the bitterest of anguish. That Miss Curtiss had cut him was unmistakable. But why? At Drill Pit she had been so amiable and so good. Kind almost to familiarity, even to confidences regarding her private history. And now she hardly acknowledged his greeting, and declared her intention of not exchanging a



They set off at full trot.



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word with him. It seemed monstrous! Some one, then, had been traducing him to her. But who? How? What atrocious calumnies had they been inventing? That is what Raymond asked in anguish, as he stood petrified in the hall.

The insolent look of the peach-blossomed flunkeys, who had noticed and enjoyed the little scene, recalled the young inventor to his senses. He crossed the hall and ascended the stairs to Mr. Curtiss, who had given orders he was to be admitted at all times. But the tumult of his thoughts did not permit him to bring to the interview his usual calm and lucidity. In the middle of a minute explanation as to the necessity of urging on the orders given to the Congo, and on the best way of hurrying out the letters, he suddenly interrupted himself to ask,—

“Is Miss Curtiss going to be married?”

“Madge?” said Ebenezer, quite surprised. “I do not know! Who told you so?”

“No one as yet,” said Raymond nervously; “but I have just seen her go out on horseback with a young man, and I concluded she was engaged to him.”

Ebenezer raised his heavy eyebrows and looked at his questioner with so puzzled an air that Raymond felt bound to continue,—

“Is it the custom in New York for girls to ride out with a young man who is not their brother?”

"Certainly!" said Ebenezer calmly. "What harm is there in that?"

"What harm? None, certainly, if it is with your permission."

"I do not understand you, my dear Frézols. It is Madge's business, and not mine, to choose her friends, and go out with whom she likes. Besides, did you not go out with her on the river at Drill Pit?"

"Oh, I do not reckon myself!" said Raymond bitterly. "I thought such liberties were for the country, and not for the town; that at Drill Pit you could even speak to people whom here you would not even know."

Ebenezer noticed the bitterness of the words, but he was too well acquainted with Madge's independent ways to meddle with the quarrel he saw coming.

"No, no!" he continued with indifference; "my daughter is not going to get married yet; at least I think not. Although, after all, I could not swear it. Probably I should be the last to hear of it. With whom did you see her? I do not know half the fellows that hang about her. Youth must amuse itself, I suppose. But I can tell you one thing which may interest you. She told me last evening she was going to the Park this morning, and then to breakfast at Delmonico's with Edmond Peverill—"

"Alone?" asked Raymond.

"No, not alone, I tell you—with this young man. He

is the son of John Peverill, you know, of Norton, Peverill, Cotter, and Co., a very good house. Edmond is a nice fellow, I believe, but incapable of earning a cent, unless it is on a horse race when he spots a winner. Madge will cost him something if he is fool enough to marry her. Look here, my friend, I can show you her tailor's bill, if you like, as a curiosity ; I have just received it. Fifteen thousand two hundred and twenty dollars ! What do you say to that ? How is it possible to use in one season fifteen thousand two hundred and twenty dollars' worth of riding habits and sundries ? That is what puzzles me !”

And Ebenezer laughed as if he was quite satisfied all the same.

Perhaps his secret intention was to warn Raymond of Madge's expensive tastes, so as to prevent him becoming too interested in her.

“If I were to show you a few other bills I would make your hair stand on end,” he continued, complaisantly. “I don't say much of the New York and Paris dressmakers' bills—that is settled in a lump, and I know nothing about the details. But see here ! Here are four thousand six hundred dollars for gloves, two hundred and forty dollars a month for flowers, merely bouquets and button-holes ! There is no sense in it, is there ? It is a little my fault, perhaps. I have urged her on to these extravagances. But what would you do ? I like to see her

well turned out. What is the use of having the best oil wells in Pennsylvania if one can't please the whims of an only daughter? Madge is the best-dressed girl in New York, and that I am sure of!"

This conclusion probably appeared very slightly consoling to the wounded spirit of Raymond, for rising very suddenly, he took his leave and departed to Far Rockaway, cursing his fate, his poverty, and all fine horses and capricious young ladies. Doubtless he was wanting in philosophy, and should have taken Madge's incivility more coolly. But he was only twenty. At that age a mountain is easily made out of a molehill.

CHAPTER X.

DANCING AND DEPORTMENT.

DURING the days that followed this meeting with Madge, Raymond took care to avoid her, going very seldom to Curtiss House, and always at such times as he would not find her with her father. Several times Ebenezer pressed his young friend to stay to breakfast or dinner, but without his invitation being accepted. Under one pretext or another Raymond managed to decline it. He was wounded to the quick, and his heart was full of bitterness. He probably would have laughed at such impertinent caprice if he had occupied a sure and definite position in the social hierarchy. But the more he reflected on his adventure the more he persuaded himself that the rudeness of Miss Curtiss was due to the doubtfulness of his position in the world as shown in some degree by the negligence of his deportment.

"I am in her eyes an insignificant nonentity, a mere walking gentleman with whom one can exchange a few words on the journey, or during an excursion, and ignore

elsewhere," he said bitterly. "Or rather, what is much more simple and humiliating, she did not find me well dressed enough to speak to me before the fellow who was escorting her—or, who knows? before those peach-bloom flunkeys! I wanted a well-cut jacket, a fashionable hat, and a pair of gloves, before she would deign to recognize my face!"

And then thinking with what grace she had laughed, chatted, and exchanged confidences with him on Yellow River, his blood boiled; he expanded inwardly in diatribes against the insolence and narrowness of ideas among women in general, and in Madge's case in particular; and he swore that he would never think of her again except with horror. But at the same time, by a curious contradiction, he conceived the idea of completing what was imperfect in his worldly education, and becoming an accomplished lady's man. He resolved henceforth to divide his time into two parts, the first to be devoted to his transatlantic tube, the second to calisthenics. He found out a tailor of reputation, and his consultations with him resulted in a complete transformation. He took lessons in fencing and riding. One day, having noticed on the fourth page of a newspaper an advertisement from "M. Isidore, de Paris, Maître de danse et de maintien," he made a note of the address and called on M. Isidore without delay.

At his ring a little old man came to the door and fixed on the visitor two hollow, anxious eyes.

"Monsieur Isidore?" asked Raymond, removing his hat politely.

"That is my name," said the old man, who seemed very ill at ease.

"I wish to take a few lessons in dancing and deportment," said the young man, not without a faint blush.

"Lessons!" exclaimed the little old man, his face lighting up with a ray of joy. "Kindly come in, sir; I am at your service. I confess that at first I had taken you for—hum—for a town official. They come so very frequently to collect taxes in this confounded country. Come in, sir, come in. Mademoiselle Blazy, my daughter," added Monsieur Isidore, de Paris, introducing Raymond to a tall and oldish lady of a very melancholy appearance occupied in fancy work at the window. "Mademoiselle Blazy," said he delightedly, "here is a gentleman who wishes to take a few lessons in dancing and deportment. Monsieur is doubtless a compatriot? I could not doubt it from the perfection of his accent in our beautiful language. Monsieur will not fail to make rapid progress. A young man like him will know how to dance and hold himself, even from birth. When would you like to begin, sir?"

"At once, if possible," said Raymond, touched by the

anxiety he read in the eyes of both father and daughter. "If you will tell me your usual terms—"

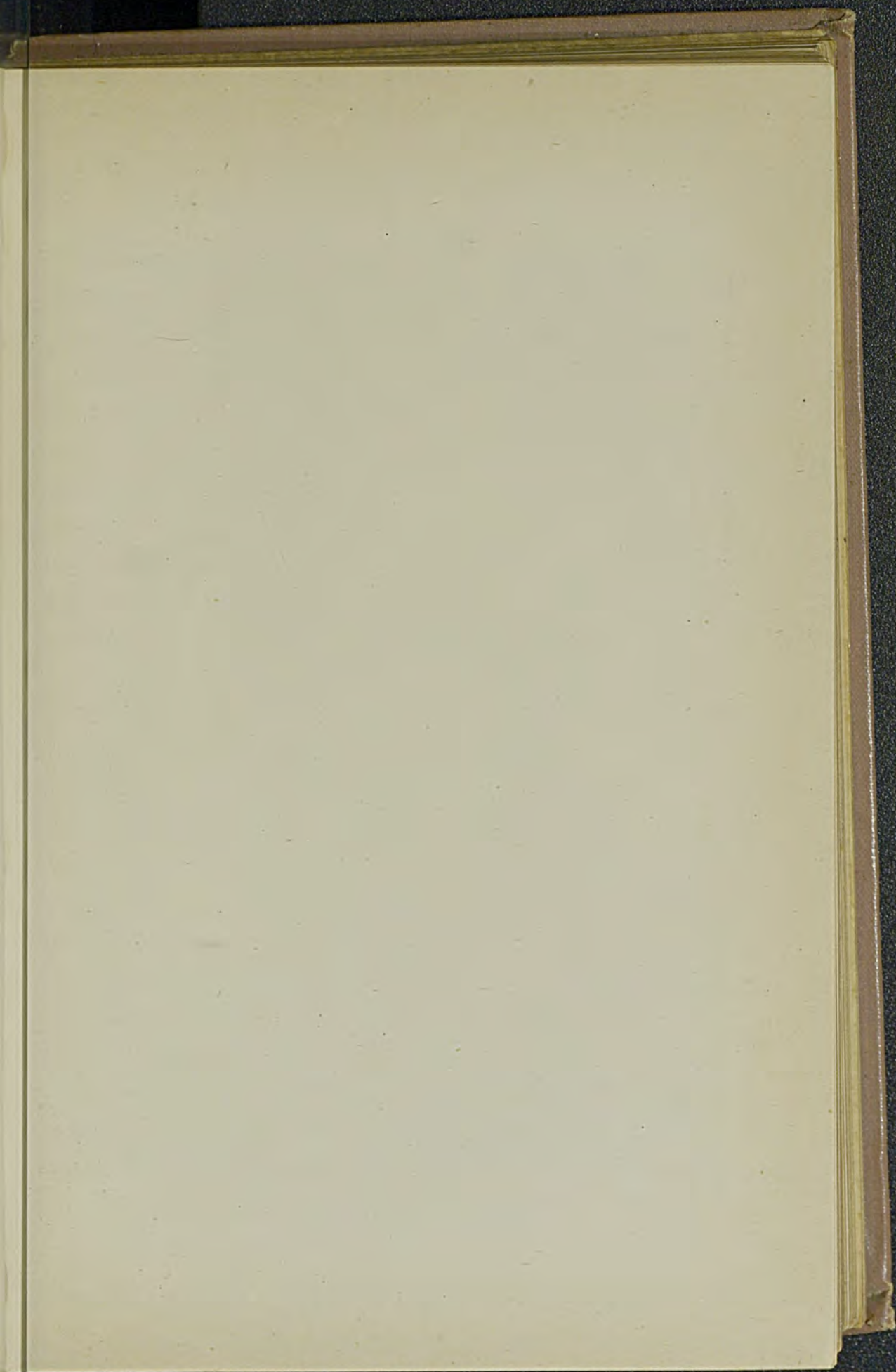
"It is usually a dollar each lesson ; but for a compatriot, we would willingly make a reduction if you wish it—"

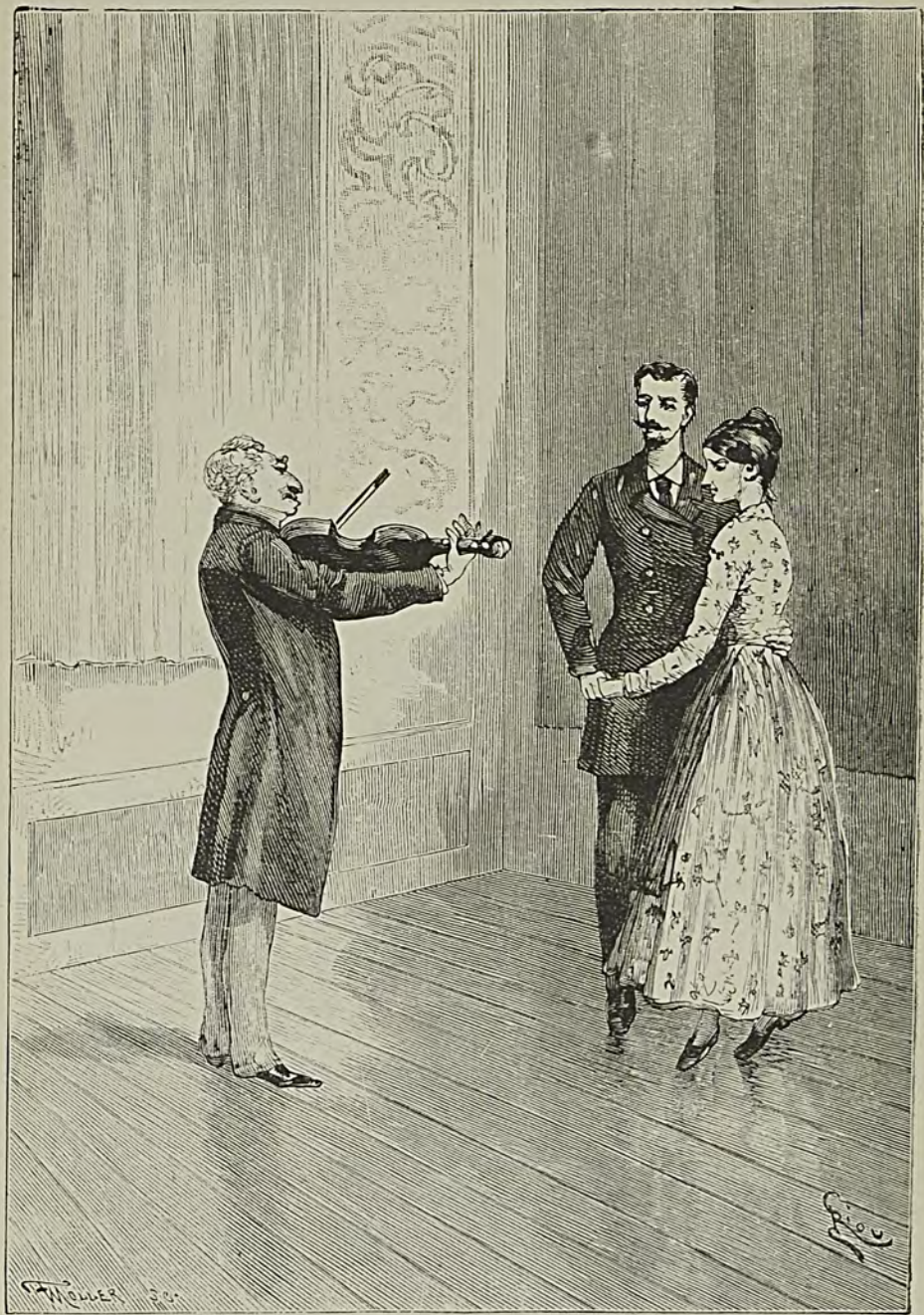
"On no account. I have no right to anything of the sort, for I shall be a deplorable pupil, and I am ignorant of the very A B C of the art. Will you allow me to pay in advance for twelve lessons?" and Raymond drew from his pocket-book a few little bank notes, which he handed to the old man. "I may tell you I have not much time at my disposal, and that I should like to set to work at once."

"Then take your places !" exclaimed Monsieur Isidore, whose eyes sparkled with satisfaction.

He unhooked a little violin that hung on the wall, and scraped out the first few bars of a polka.

"You will walk towards Mam'zelle Blazy," he continued, with his bow held out, his head high, his look assured, although respectful. "You will hold your hat with care, without stiffness—you have not made the mistake common in this country of leaving it in the ante-chamber—and you bow to your lady, and ask her for the honour of dancing this polka with her. Then delicately you encircle her figure with your right arm, and take the tips of her fingers in your left hand, and you go ! Perfect ! Perfect ! That is the very thing !" said Monsieur Isidore,





"Come! advance! advance!"

while Raymond, obedient to his orders, bowed without stiffness to Mademoiselle Blazy, and encircling her angular figure, began to mark the measure indicated by the violin.

"You have never danced, monsieur?"

"Never."

"Ah! I am to tell you you were born for dancing And it is not a common thing in this country," said the little old man, not without solemnity. "Before eight days, monsieur, you will excel all these English, or I am not called Isidore Blazy! Come! Advance! Advance! Mam'zelle Blazy, conduct monsieur!"

And the little old man, as refreshed at the scrape of his fiddle as a war-horse at the blast of the trumpet, began to play with quite feverish vigour.

At the end of a few minutes Raymond danced the polka as if he had done nothing else all his life.

"That is very good! Will you take Mam'zelle Blazy back to her place? In leaving her you bow profoundly—yes, monsieur, I do not permit the impertinent nod of the coxcombs of to-day. You bow low, your arms falling softly, your heels together, the hat in the left hand! It is correct to leave it, when you dance, in your lady's chair; but it is more correct and more gracious to hold it in your hand. Now, come for the valse! Will you go to the end, that I can see you traverse the room to reach your partner? Good! Very good! But a little more

dignity, perhaps. A little less swing. You walk like a sailor, monsieur. Very bold in the free-and-easy way, but a little too much so for a drawing-room. There, that is better! That is very good. The invitation as before. Ah! In case the lady is already engaged, and not able to accord you the dance, you bow, but this time with just a shade of difference—a *nuance* subtle and delicate of regret. And you retire without asking her neighbour, which would be discourteous to both. Now, Mam'zelle Blazy!"

He spoke with extraordinary volubility, scraping his violin as if he were possessed, and occasionally adding example to precept. Infirm and enfeebled as he seemed, he jumped as he played and marked the time, and seemed transfigured by his music. And looking at the bareness of the parlour, the profound melancholy of the daughter, the vivacity of the father, Raymond could not help feeling pity for them, mingled with respect. Poor Monsieur Isidore, de Paris! There was in his bearing, in the accent of his broken voice, in the cut of his old frock coat, and the charming ease of his manner, something which reminded one of the last century. Raymond could think he was in the presence of one of the courtiers of the old *régime*, reduced to earn their bread in teaching the only art they had properly learnt, and carrying to the ends of the world the renown of French politeness.

Assuredly he would have found it difficult to fall into better hands. Monsieur Blazy loved his art, and knew it thoroughly. Even in the tone in which he spoke to his poor old daughter there was a *nuance* of tenderness and a flower of courtesy which was a revelation to the young Frenchman. At the end of an hour he retired, enchanted with his first lesson, and promising to return next day.

As to Monsieur Isidore, de Paris, he was no less enchanted with his pupil, the only one, alas! that he had seen for many a long day; and he spent the evening talking to his daughter of the miracle of deportment he proposed to make out of such a gifted young man.

"The English will see what he is, if they are capable of appreciating him, the poor creatures," he said, "and then, Mam'zelle Blazy, they will come to us by the dozen, as they used to do."

Mademoiselle shook her head sorrowfully. She wished she could believe in the happy omen, poor girl. But how often such hopes had been deceived! Meanwhile the safest plan was to return to her embroidery and ply the needle.

These mundane cares, including his lessons in fencing and riding, did not prevent Raymond from devoting himself body and soul to his work. Each day he returned with new vigour to intellectual work which would have been simply overwhelming without such physical exercise.

Ten or twelve hours a day he remained bent over his task, reading and commenting on innumerable letters, carrying on an enormous correspondence, considering contracts, verifying statistics, and studying and retouching working plans and estimates. It was necessary for him to push on with the construction of a gigantic basin at Far Rockaway, the manufacture of the metallic spirals forming the framework of the transatlantic tube, the establishment of the subterreanean conduit destined to feed the reservoir from the sources at Drill Pit ; to say nothing of the conversion of the steamers into workshops, of the instruction of the foremen that were to be placed in charge of them ; the difficulties raised every instant in the delivery of material, and the thousand-and-one difficulties always met with in every grand undertaking.

Sometimes there would be disappointments like that resulting from a suspension of work on the part of one of the principal contractors owing to a strike. Sometimes there was a stroke of luck like the sudden offer of a Lisbon firm of ten thousand tons of gutta-percha accepted by telegraph, and delivered in a fortnight at New York.

But at length Ebenezer's money and Raymond's devouring activity overcame all obstacles, and six weeks had not gone by before the works were in full swing at Drill Pit, Far Rockaway, at New York, and Cape St. Mathieu, the extreme point of Finisterre, to the northward of Brest.

A French engineer, selected by Raymond, had surveyed a depression of the ground closely shut in by two spurs of the peninsula, the Val Tregonnec, which only required a wall of eight hundred meters to transform it into an artificial lake. This sterile valley had been secured at a low price on a ninety-nine years' lease, and the works had already been begun. It was in this reservoir that the transatlantic tube was to deliver sixty meters below the ocean level.

Its point of departure at Far Rockway was eighty meters below the same level. It would thus form a regular siphon, in every sense, if we take into account the earth's curvature between the two ends; but in practice, and over a limited length it could be considered as horizontal.

At the same time as the land works were going on forty vessels were chartered and fitted at New York, London, Havre and Bordeaux, and on them were shipped the segments of the tube as made by the ten contracting firms on the plans with which they had been furnished. It had not been necessary to buy these ships, but simply to charter them on the usual terms as to their crews and insurance.

Soon the laying of the tube commenced in sections of three hundred kilometers assigned to each ship. After the first week it became evident that the work would proceed

without serious difficulties. It began slowly enough, for each ship only laid a hundred or two hundred meters of tube a day. But gradually they acquired the knack of the thing, and an emulation set in between the different ships, stimulated by bulletins brought to them by special despatch boats. By the end of the first month they had exceeded an average of two kilometers per ship per day.

The great point was that the immersion was accomplished steadily, that the floats answered their purpose, and that the tube retained its horizontal and rectilinear position. This the divers, in the usual costume, and carrying an electric light made after Raymond's own design, took care to verify as the tube fell into position. If the horizontality was not perfect, the pneumatic signals sent up to the ship soon caused matters to be put right in a very simple way that practice made familiar to all the foremen.

As the verification proceeded, the divers fitted on little submarine floats the segments of the small electric cable which went with the tube through the Atlantic. Whenever the sea became rough, or the weather uncertain, work was suspended, and when necessary the tube was cast adrift, but always with its end sealed, and attached to an enormous electric buoy. In this way there were few losses. Once a segment of seven kilometers of the tube was lost, owing to a foreman being obstinate in continuing

work in threatening weather ; and on another occasion the electric buoy indicating the end of a tube either went out or disappeared, and was not recovered ; but the position had been noted so exactly that after a search of five hours the grapnel brought the tube to the surface.

The victualling of the floating workshops was carried on by steam transports plying between the headquarters and each group of ships, and carrying coals, gutta-percha, metal frames, and provisions.

After the inevitable uncertainties at the beginning everything worked well, and it became evident that the completion of the undertaking was only an affair of time. Raymond had previously fixed this time at three hundred working days, with twenty ships, or a hundred and fifty with double the number. There was therefore hope that all would be finished in four months, that is before the winter. The works at Far Rockaway were therefore pushed on with rapidly, as the tube might else be finished before the depôt.

The day that Raymond was able to give Ebenezer tangible proof of these results by a batch of favourable reports gathered on an excursion to the floating workshops nearest the American coast, and a statement of the lengths already laid with success, the petroleum king, seeing success in view, was so pleased as to give a ball in honour of the good news.

Invitations were sent out. The entertainment was to excel in splendour anything ever seen in New York. Ebenezer desired to display his wealth, and at the same time affirm his confidence in his ultimate triumph. The enterprise had in fact been violently criticized. From the day it began the press had fastened on to it, with all that indiscreet ardour which is brought to bear in America on anything that can be of public interest. This was an international event of importance, one of those works which mark another advance in the conquest of the natural forces by humanity. If the Yankees were proud that it had originated amongst them, they felt a certain amount of jealousy at it being originated by a Frenchman, like all the great industrial conceptions of the century. And on this account there was a noisy conflict of opinions in the avidity with which its progress was followed.

All the financiers, all the men of science, and all the newspapers had joined in the discussion as if it were a matter of politics, and not a question of fact. Some held that the enterprise would fail disastrously, and supported their contention by the most plausible arguments. Others believed in the complete success of the transatlantic tube, and advanced arguments in its favour just as forcible. Some made fun of Ebenezer for having embarked alone in an enterprise so hazardous, and subject to such numerous eventualities ; others praised his truly American audacity,

reckoned up the immense profits he would make, and occupied themselves in devising some means of cutting them down. A grand entertainment at Curtiss house to mark the success of the preliminary operations was quite an event, and set all New York talking.

Amid all this noise and impassioned discussion Raymond kept himself modestly in the background, shut up in his office, giving his orders by telephone, or the electric cable ; avoiding as much as possible all interviews, applications for which came every morning from shoals of reporters, and declining all the invitations that reached him from every side.

But this time it was difficult not to appear at Curtiss House at an entertainment given in honour of his work. All he could do was to get out of dining with Ebenezer on pretence of urgent business, and to arrive at the ball very late.

He had hoped that then he would be unnoticed. But as soon as his presence was discovered every eye was turned on him. People were astonished at his youth. They admired his distinguished look and elegant bearing. The men asked to be introduced to him ; the ladies reserved their best welcome for him. Above the continuous murmur of conversation and the strains of the two orchestras, hidden among the groups of flowers, one name leapt to all lips and spread through the room, that of Raymond Frézols.

The hero of the general excitement seemed little moved by it. He had brought to the festive atmosphere a sadness which he did not allow to appear in his face, but which was none the less heavy at his heart.

Suddenly, as he came through the door between the picture-gallery and the library, he found himself face to face with Madge, who was passing on the arm of Edmond Peverill, glowing with freshness and beauty, in a marvellous ball costume arrived from Paris the evening before. She saw Raymond, and stopped short as if to exchange a few words with him. The expression of her eyes, her smile, her hand ready to be held towards him, all seemed to show an intention of making reparation by a friendly and flattering welcome for the insult for which she had doubtless already scolded herself.

But Madge's smile died away on her lips when she met Raymond's look as he ceremoniously stood aside to allow her to pass. The look was one of such icy disdain, and said so clearly, "It pleases you to recognize me to-day; but I do not forget your behaviour last month," that the poor girl was amazed. She blushed to the roots of her beautiful hair, and then turned pale, and, without a word, trembling with shame and vexation, she drew her partner away.

"No one! No! No one in all her life had treated her like that. To refuse to bow to her, to accept the hand

she offered—she, Madge Curtiss! It was too much, and she would have vengeance!”

Unfortunately she could not be revenged on the guilty. And so she brought the weight of her anger to bear at first on Edmond Peverill, the unfortunate fellow, and then on her other partners. Never had they known her so difficult to please and so ready to take offence. She accused them of not keeping step, and stopped dead in the middle of a waltz, and met with scornful silence every effort to amuse her. The news soon spread among her friends that she was in a terrible temper, and no one knew why; it almost went as far as a nervous attack. Edmond Peverill, that innocent young man, was so ill-advised as to say out loud that Alice Cooper was waltzing delightfully. And who at that moment was Alice's partner? Why, that odious, intolerable Frenchman, the very Raymond Frézols who had just snubbed so disgracefully the daughter of the house!

Immediately after the scene in the library he had been seized with an inclination for dancing. He had been introduced by Ebenezer to two or three young ladies, and he had danced, danced like a dervish; he had even danced so well, with such grace and precision and vigour, that a crowd had formed round him to admire him. And one after the other, the ladies who had been honoured by a waltz with him, had come to sing his praises to Miss Curtiss.

"My dear, he is charming, this young Frenchman. No once can dance like him. And he is as amiable as he is well bred. Are you not going to give him a waltz? But you do not appear to know him? Has not your father introduced him to you? Shall I give him a hint?"

Oh, the humiliation! How could she confess she had behaved so stupidly to the hero? How could she say that she had had the misfortune of being cut by him?

It was at this moment that young Peverill, with the sense of opportuneness that characterized him, chose to sing the praises of Alice and her partner.

Madge turned abruptly towards him, and said to him in an undertone,—

"Edmond, a month ago you asked me for my hand, did you not? And I told you I would take time to consider about it. Well, I have considered about it, and I can give you my answer."

"Indeed!" said young Peverill, opening his eyes, "and the answer is?"

"It is just *No*, in two letters! You will take that as my answer, will you? Ah! I forgot. We will not dance the cotillon this evening."

Edmond Peverill bowed, and, dumb with surprise, beat a retreat.

This execution did Madge good. But although injuries can be avenged on those nearest to us, conscience retains its rights. Her anger subsided. She felt that there was wrong on her side as well as on Raymond's ; if he despised her, it was not without reason. With her eyes fixed on the carpet, she dismissed one after the other all the young men who disputed the honour of a place on her programme, and that so sharply that they thought she wished to have a clear space round her chair. She succeeded ; and at the end of a quadrille which she had refused to dance, she found herself alone in a corner of the room.

At the same instant, Raymond brought back Alice Cooper to her seat not far from her. By an instinctive movement Madge turned towards him and their eyes met.

"Mr. Frézols ?" she said in an undertone.

Raymond hesitated.

"You are mortally angry with me?" she continued, bending towards him and flushing with confusion. "Well, then ! I beg your pardon. Will that do ? And will you not give me just one waltz ?"

She held out her gloved hand towards him with a beautiful gesture, so timid and sincere.

Raymond took the hand and clasped it in his. How could he be angry with one who knew how to make amends so nobly ? Peace was at once concluded and

officially signed in the most fascinating of waltzes. And as he bowed after leading her to her chair,—

“You know,” she said, with her nose in her bouquet, “that I reckon you for the cotillon?”

CHAPTER XI.

THE SUBMARINE SYPHON.

AFTER this memorable evening, the relations between Madge and Raymond were of not so stormy a character, but they were not so amicable as the solution of the crisis might be thought to indicate. By a kind of tacit agreement there was no explanation beyond the word of apology which vexation had wrung from Miss Curtiss. She would even have been much embarrassed to say how she had been led to utter this word. It was assuredly not her custom to behave in this way. Like all the young ladies of her country she professed the greatest contempt for the strong sex in general, a contempt, to a certain extent, justified in the United States by the habitual vulgarity and occasional bad manners of the Yankee young man.

Among a people where the boys know that for the most part they must get their own living and leave school at fourteen or fifteen to go into commerce or industry, it is

inevitable that high intellectual culture and the refinement which results from it should be the exclusive right of the women. And it necessarily follows that knowing their superiority in this respect to their brothers, their cousins, and their husbands, they should look on the men as simple helots—*breadwinners*, according to the current expression. Such an opinion necessarily results in an unmistakable impertinence on the part of American girls towards their admirers. And if they are good-looking and made much of, this impertinence frequently exceeds all bounds. This can be seen, for instance, on the railways, or in the tramcars, where a young woman will appear at the door and examine at a glance the occupied places, and if there is one to her liking, intimate with a poke from her umbrella that the unknown occupant must clear out—which he immediately does without protest.

As the only daughter and heiress of the very wealthy Ebenezer Curtiss, Madge had always borne herself as if she had a right to every homage. To condescend to treat Raymond as a friend in their excursion on Yellow River she had for a time quite put aside her usual notions of conduct. When she had allowed herself to say the word "pardon" at her father's ball, she had been forced to do so by her keen and almost intolerable feeling at the false position in which she had been placed, and also by the chorus of praise of which Raymond was the centre.

But when the first excitement was over, Madge adopted an attitude which she could hardly explain to herself—that of a politeness more ceremonious than was necessary. Raymond noticed the affectation, and said to himself that Madge was an incorrigible coquette. Neither one nor the other thought of the true cause of the misunderstanding, which was simply their extreme divergence in modes of thought.

Accustomed to hear praises only of what was gorgeous and costly, Madge despised money, which she scattered right and left; but she still more despised poverty, struggle, and work. She dreamed only of social distinctions or mundane triumphs, had her greatest enjoyment in noisy festivities, and honestly thought that life would be insupportable without a gallop every morning, seven dresses a day, and a ball every evening.

If she had seen in Raymond a declared admirer, a slave ready to submit to her caprices, and above all, to follow in her cavalcades, she would willingly have admitted him to her set, for he was not unpleasing to her. She saw there was a great difference between him and the empty-headed youths by whom she was surrounded, and though according an exaggerated esteem to the elegance they displayed, she was forced to admit that their company was occasionally very wearisome. With Raymond, on the contrary, there was always something interesting to learn or discuss.

Even the resistance he offered to her tyrannical pretensions invested him in her eyes with quite a reputation ; without considering that he had shown himself the most polite and the boldest of her cavaliers on the two or three occasions when he had consented to ride out with her on one of Ebenezer's horses.

But, on the other hand, she was irritated that he could keep his head, irritated above all that he would not sacrifice to the world a minute of the time devoted to his work, and that the transatlantic tube remained of more importance to him than the finest lawn-tennis or croquet party.

On his part, Raymond could not recall without gentleness the charming excursion on Yellow River, in which Madge had shown herself so genuine and simple, and the instinctive movement with which she had so honourably made amends when she thought she was in the wrong towards him. But these incidents only served to bring out more clearly the divergence between his ways and those of Miss Curtiss. He saw not only the proof of a natural kindness of heart fitted for the tranquil pleasures of domestic life, but the proof of the impassable hedge that separated him from the social sphere in which she had taken root. Madge had been intelligent enough to see that her conduct on the steps was simply foolish, and courageous enough to repair her clumsiness ; and at the same time she had a mind low enough to assign

importance to this miserable frippery of riding-habits, horse-whips, and patent-leather boots! For in the one case it was not possible to doubt that she had despised him because he was dressed like a man busy at his work, and in the other had sought him out because he wore a black coat and danced well. Raymond's fiery, straightforward nature revolted at the comparison. Sure of himself, his strength, and his courage, conscious without vanity of his high faculties and his future, he could well believe he was in every way Madge's equal, and could not admit that the tailor could add an appreciable element to their relations with each other.

Under the appearance of a certain familiarity he was really waging a sort of hidden war. Without saying a word, for he recognized that he had no right to say it, he disapproved of the life Madge was leading, with her continual walks abroad, her breakfasts at restaurants, her theatre parties followed by gorgeous suppers between two regular tides of twenty-dollar bouquets, which custom authorizes for New York young ladies. As to Madge, she thought it ridiculous that a man of twenty should shut himself up from morning to night in a suburban office and think nothing better worth thinking of than the probably chimerical enterprise which he was striving to carry through.

"It is unfortunate, my dear," she said one evening to

Alice Cooper, "that he is not one of our set, and will always prefer a steam-engine."

And that really expressed her opinion concerning Raymond Frézols, for in stating that there was no harmony between them in sentiments or tastes, she had sense enough to regret it.

And so several months elapsed, in the course of which the works on the submarine tube, continued all along the line with constantly-increasing activity, at last came to an end.

One morning in October, Raymond could, to his intense delight, announce to Ebenezer Curtiss that the tube was an accomplished fact. It was laid from shore to shore. The last junction had been made, The reservoir at Far Rockaway had been found not to leak. The subterranean conduit from Drill Pit could, at a word, fill it with petroleum; and this petroleum, stored in a hundred monster reservoirs, was only waiting the turning of a tap to enter on its journey. On the other hand, the little electric cable affixed to the submarine tube worked splendidly, and the engineer at Val Tregonnec telegraphed the completion in the open of the site of what was intended to be an artificial lake of petroleum. And pneumatic machines, sent from Paris, were already at the mouth of the syphon, ready to draw off and rarefy the air it still contained.

A rapid excursion of Raymond to Cape Saint Matthieu

assured him that the works on the French side had been executed with the care and perfection of detail which for a long time have established the renown of our engineers. He was less easy about those of the American contractors, and the event justified his fears. In the course of his tour of inspection with Ebenezer at Drill Pit he discovered numerous defects in the subterranean conduit, and these took many weeks of supplementary labour.

As a slight compensation, he had the pleasure of finding Peter Murphy in a most flourishing condition, if such a word can be applied to that human ruin. His physical health had manifestly improved, under the influence of regular work and strengthening food. Clothed well, shod well, and wearing a large felt hat, he seemed quite another man, as he gaily declared to Cassoulet, who accompanied his chief on this inspection expedition.

"You look quite respectable," said Cassoulet to the albino. "Why, I hardly knew you! If they were to tell me you were going to be married, or to be elected Mayor of Drill Pit, I should not be surprised, upon my word!"

And Peter Murphy bridled up, much flattered at the compliment. Mentally, also, he seemed to have gained somewhat with the improvement of his physical health. The clerk who had succeeded Raymond in charge of the travelling office declared that he was pleased to bear testimony to the assiduity of his assistant. Not only did Peter

Murphy punctually fulfil his duties, carrying messages to the houses, and keeping the office scrupulously clean, but he had begun to spell out the Morse alphabet, and would soon be capable of transmitting a telegraphic message.

This news was received by everybody with great satisfaction, except by Ebenezer, who persisted in his opinion of the albino.

"I do not like to see that old man so near my depôt," he growled between his lips. "They may say what they like, but this progress is not natural in a man who is really an idiot. And if he is not an idiot, what folly to put the least confidence in him!"

The depôt of which Ebenezer spoke was that he had established near Johnson's Well, and near which the travelling office had been recently installed. This Johnson's Well was so abundant that in a month it had filled all the reservoirs. These reservoirs were of a total capacity of twenty million barrels, and formed a regular iron town, which, with its cylindrical constructions, resembled from a distance a fleet of monitors stranded high and dry on a sandy beach.

The tours of inspection being over, and the works being complete, the end was near, and there only remained to inaugurate the tube through the Atlantic.

A day was fixed for the opening, in concert with the authorities of New York State, and even of the Union, for

the event took the proportions of an international festival. France, like the constituted authorities of the American Republic, was to be represented at the ceremony. All the steamers had arrived in New York Harbour after accomplishing their part of the work, and were to participate in the festival by firing a salute. A banquet at Far Rock-away, fireworks on the great reservoir, completed the series of rejoicings announced for the occasion.

This reservoir, built of masonry, lined with iron, and surmounted by a metal roof on iron framework, was one of the curiosities of New York. Crowds had already been to visit it, to stand on the foot-bridges, and look at the end of the great syphon which ran out under the Atlantic.

A colossal copper stopper, kept in place by a screw working backwards and forwards by a powerful steam-engine, hermetically closed the mouth of the tube. But the mouth now remained open to allow visitors to explore it, and they seemed to find immense pleasure in looking into the tubular tunnel whose other end was in France.

Most of the visitors indulged in the pleasantries of shouting out more or less ingenious witticisms, in the hope, perhaps, that they would be heard and appreciated by the Frenchmen at Val Tregonnec.

Outside the reservoir the tube, carried by a cast-iron viaduct, and protected by a bolted casing, gradually sank into the sea, to enter it fifteen hundred meters away, among

rocks covered with concrete, which preserved it against injury. The electric cable which ran by the side of the tube all the way, led on the American side into the central office at Far Rockaway, and on the French side to Brest.

It required at least a fortnight to fill the reservoir with oil through the subterranean tube from Drill Pit. As soon as this operation was begun, access to the reservoir was rigorously forbidden to the public. At the same time the stopper was screwed into place, and orders telegraphed to Val Tregonnec to set the pneumatic machines at work.

Each day the French engineers in charge of these machines wired through the amount of rarefaction the air in the tube had undergone, which was also indicated at Far Rockaway by a series of manometers. This rarefaction, at first very slow and almost insensible, gradually increased, and ended by falling several hundredths of a degree. Raymond awaited the result with impatience, as he considered it an important guarantee of success, for it showed that in no place had the tube been damaged, either in the laying or in the agitation of the sea. The inventor saw all his theoretical previsions fully justified, and he remained satisfied that at such a depth the tube through the Atlantic had nothing to fear from storms or floating ice, for at the end of the summer, and especially during the autumn, many violent cyclones had swept across the ocean.

The inauguration was fixed for the 20th of November. As the day approached, the newspapers of both worlds discussed, more or less excitedly, the chances of success. It was generally agreed to consider that the great difficulties had been overcome. The tone of the more important organs of public opinion reflected this confidence, and the disappointed ones gave over their objections, which now seemed to be valueless.

In Ebenezer's immediate circle every one was pleased. He above all things was pleased that when he came to total up his expenditure, he found it amounted not to 6,000,000 dollars, as Raymond had estimated, but only to 4,831,000 dollars.

"Eleven hundred and sixty-nine thousand dollars remain in hand!" said he. "That is a saving not to be despised, and I did right down well to refuse to share the cake!"

"That remains for the unforeseen," said Raymond, diplomatically. "Do not forget that! Remember, Mr. Curtiss, I have always said six millions of dollars, and no less—"

There was in his voice, as he recalled this circumstance, something particularly serious, which struck Ebenezer. Later he remembered it. But at the moment it did not attract his attention. More pressing cares occupied him. He had to prepare for the inaugural festival, to draw up

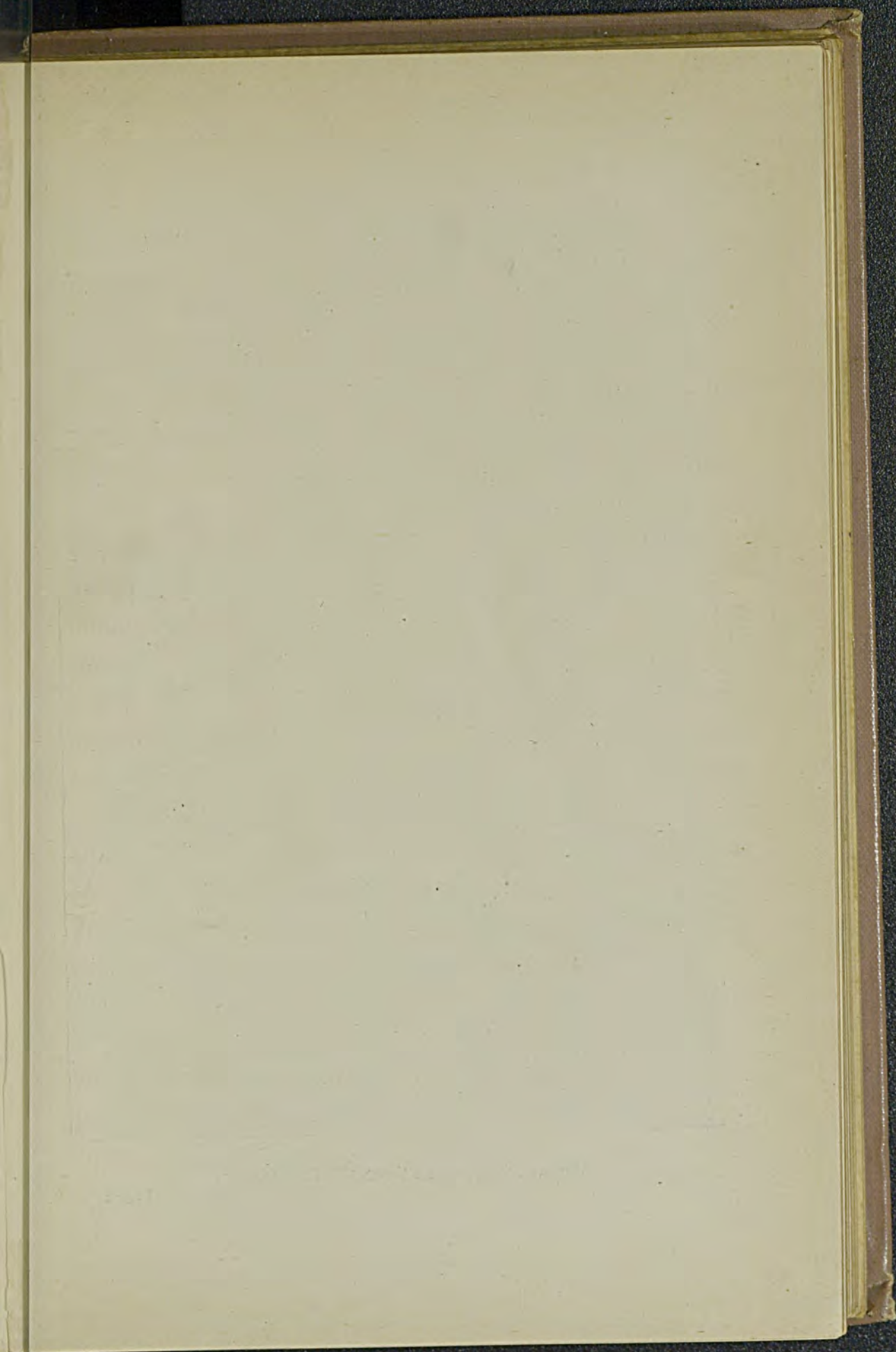
the final programme, to issue the invitations, all of them things very pleasant to the innocent vanity of the petroleum king.

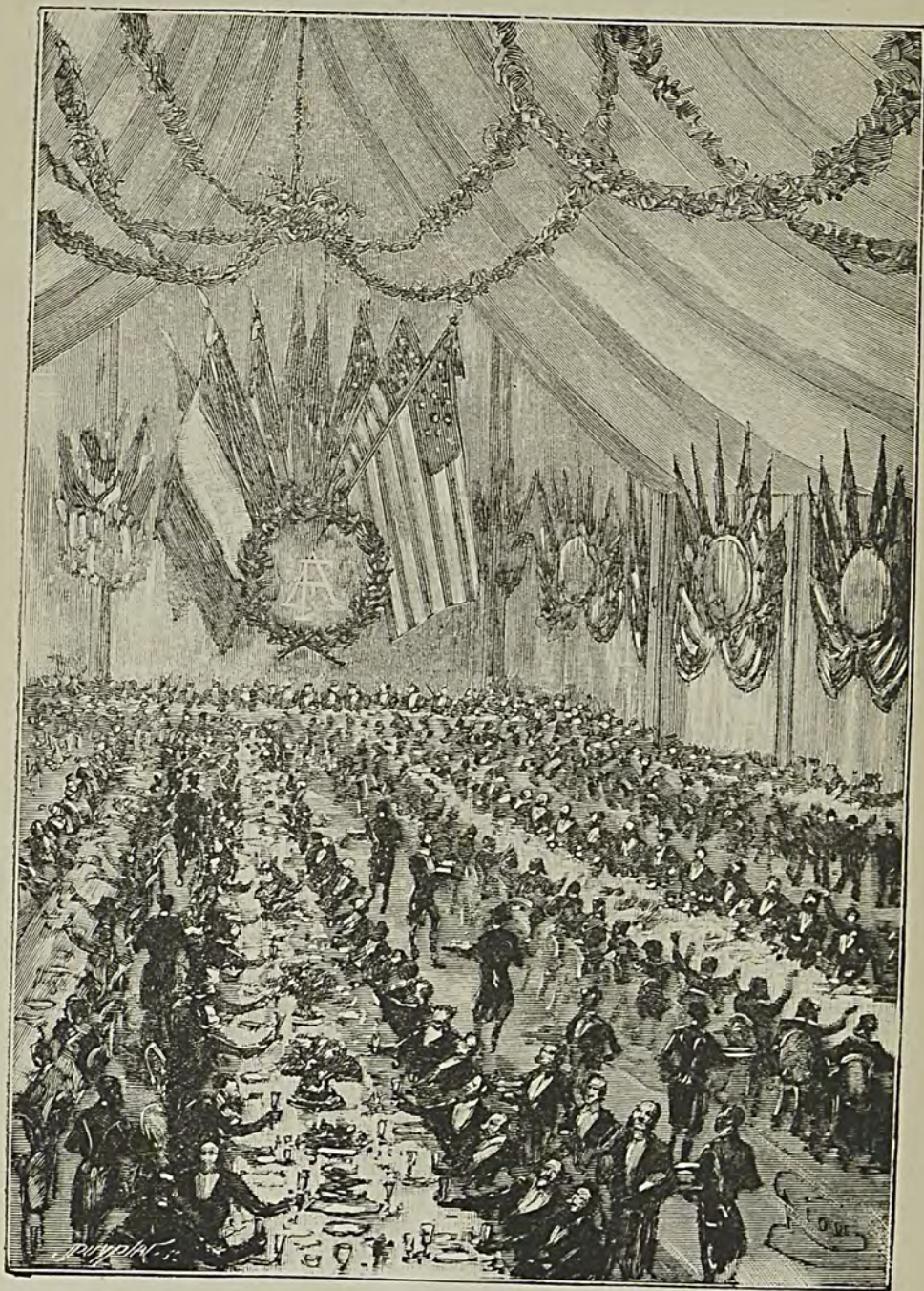
The ceremony would be a small affair after all. A mere turn of a key given by Madge to a small lever would start a powerful steam-engine which would unscrew the stopper notwithstanding the formidable pressure of the petroleum contained in the reservoir.

Everything went off well. Madge arrived in a gala carriage with an escort of young people, and received from the head of the Far Rockaway works an enormous bouquet and a diminutive key. She put the key where she was told, gave a turn, and a subterranean growl, changing soon into an unmistakable gurgling, indicated that the petroleum was beginning to flow into the syphon's open mouth.

Two minutes later Raymond came up from the depths and announced that the manometers showed the presence of the oil in all the sections of the tube near the departure point. The already very apparent sinking of the level of the contents of the reservoir also bore witness to the regularity of the operation.

Immediately the signal was given by a rocket, and the ships off Far Rockaway began firing their salvoes of cannon, which would be followed at night by an illumination of the coast by means of petroleum lamps (an idea





Another banquet on the 29th of November.

which had occurred to Ebenezer Curtiss) and a grand display of fireworks. In the meantime a lunch of six hundred covers, preceded and accompanied by numerous speeches, gathered under a vast tent the chief dignitaries of the Union, the foreign delegates, and the engineers and sea-captains who had taken part in the enterprise.

At this banquet many of the guests expressed themselves disappointed at not having a telegram announcing the arrival of the oil on the French coast. It had to be explained to them that some time must be allowed for it to accomplish the journey. According to Raymond's very careful calculations the journey would last at least eight days. And that is why Ebenezer Curtiss, always magnificent, had issued invitations for another banquet on the 29th of November. He held it essential that he should have witnesses to his triumph. And so it was with unalloyed bliss that at this second banquet he could read to his guests as they took their seats at the table the following telegram which had come from Brest about two hours before:—

“4.39 a.m.—Petroleum arrived and flowing out into Val Tregonnec. Cordial felicitations from the maritime prefect and the French Government to the initiators of the enterprise.”

“4.50 a.m.—The output of the tube seems to be six cubic meters per second.”

The news was received, as may be imagined, with enthusiastic acclamations. The whole assembly thronged to shake hands with Ebenezer, to congratulate him and to reckon up the consequences of this great industrial event.

Amid the general excitement no one remarked the singularly guarded attitude maintained by Raymond. Alone he remained calm, and even a little anxious; alone he seemed to be doubtful of a success which appeared to be won.

"Six cubic meters a second!" said Ebenezer, who had drawn out his note-book to make a rapid calculation. "That is to say, 360 cubic meters a minute, 21,600 an hour, 518,400 a day! Gentlemen, in less than a week we shall be able to send through our tube all the oil Pennsylvania yields in a year!"

"And it is to you, my dear Frézols, that we owe this splendid idea!" he said, turning to his young partner in a burst of gratitude.

But this time, like everybody else, he was struck by the icy coldness with which Raymond received these manifestations of delirious joy.

"Wait! We are not at the end yet!" his whole physiognomy seemed to say.

And, as if to justify his distrust, Cassoulet brought him in at that moment a telegram just arrived through the cable.

The young Frenchman read the despatch, and, striking

the table lightly with his knife, in the American manner, to show he had something to say, he rose.

"Gentlemen," he said, "I am sorry to interrupt your congratulations, but a regrettable piece of news that I have been expecting every hour has just arrived. The oil has ceased to flow at Val Tregonnec. After two or three hours of activity the submarine syphon has slackened speed ; it began to give but a feeble output ; and finally it stopped. At the present moment the stagnation is complete—"

Signs of surprise, as the parliamentary reports say, received this serious news. The guests looked at one another, not knowing what to think.

The first to break the silence was Ebenezer, who struck the table with his fist.

"It is impossible!" he exclaimed. "Or there is some villainy! Some scoundrelism of Timothy Campbell's or some other envious ruffian! It is against all common sense! Once a syphon is full it will flow so long as the level of the start is above the level of the arrival. That is physics! We are not children!"

"Physics are always right," said Raymond. "All we have to do is to understand them. If it were a syphon of ordinary proportions, I should say with you: Yes, the laws of hydrostatics are there, and once this submarine syphon is full it ought to flow. Unfortunately, this is a syphon of six thousand kilometers, which worked at first by pneu-

matic machines; but once the vacuum so caused was filled up, the syphon returned to its normal condition, and it necessarily stopped. It must stop owing to the friction, if the friction counterbalances the atmospheric pressure added to the liquid column of the difference between the levels—"

"Why did you not tell me that six months ago, and not to-day!" roared Ebenezer furiously. "That is a little mistake which will cost me five millions of dollars—"

"There is no mistake, I was expecting this result."

"Then you are unpardon—able!" stammered the petroleum king.

And suddenly, beating the air with his hands, he fell back, struck with congestion of the brain.

CHAPTER XII.

NIAGARA TO THE RESCUE.

THE tumult which followed this painful accident prevented Raymond from giving the explanations which he could doubtless have furnished. All at the table rose in an uproar. They carried Ebenezer into a neighbouring room and laid him on a sofa. Two or three doctors, who happened to be present, came forward, undid his cravat, bathed his temples with alcohol, ordered a mustard bath for his feet, and tried all the usual means in such cases to bring him back to life.

Their efforts were crowned with success. His chest rose to exhale a deep sigh ; he opened his eyes, looked round, and seemed to regain consciousness. Soon he was able to answer the questions of the oldest of the doctors, who, according to usage, had taken charge of the case. It could be hoped that the syncope caused by surprise and anger, would be without serious consequences ; but it was necessary that for the present he should be withdrawn from any fresh excitement.

He was therefore put into his carriage to be taken home and confided to the care of his family.

When the dinner was over the guests dispersed on all sides. The news of the failure of the tube spread through the town, and soon became the one theme of conversation. Some people were sincerely sorry at so much lost trouble; others took little pains to dissimulate the joy they felt at the disaster of another. The newspapers did not fail to make capital out of the affair, and next morning devoted leading articles to its discussion. It was the event of the day. As if they had already said so, they agreed to discredit "the foolish and chimerical enterprise" which they had praised to the skies two days before.

"In all things," they said gravely, "we must look to the end. If the initiators of this gigantic work had reflected for ten minutes before sinking their money in it, they could not have helped discovering that a syphon of six thousand kilometers is not an ordinary syphon. They would have seen that the friction of the liquid against the tube would be an insurmountable obstacle to the realization of their project; they would have said to themselves that it would be madness to reckon on the hydrostatic effect of a simple difference of level over a field of action so vast as to embrace an arc of 75 degrees of the terrestrial globe. A child of seven years could have found this out. The projectors of the tube through the Atlantic could not. We

regret it, not only for the sake of those who have received so miserable a defeat, but for the good name of our national industry, which will suffer cruelly by this defeat. Europe is justified in saying that the new world is the classic land of charlatanism. It will see it in this vain attempt of our engineers and scientific men; it will laugh at us, with good reason for doing so. We do not thank Messrs. Curtiss and Frézols for this result, and we are compelled to tell them what we think: that in this matter they are much more to be blamed than pitied."

Such was the tone of the press. As for Ebenezer's friends, they were much more severe on Raymond. They openly accused him of having in view only his personal interest, and of throwing the five million dollars into the sea for the sake of the commissions he got on the purchase of materials. Mrs. Curtiss said this without any beating about the bush. Madge was personally more inclined to believe that Raymond had been blinded by vanity, and that he had gone into the adventure in all good faith. Neither of them took any pains to keep their opinions to themselves. And when about nine o'clock next morning Raymond presented himself to inquire after Ebenezer, and ask to speak to him, he was told by the peach-bloom flunkey that the doctors forbade the invalid to fatigue himself, and insisted on absolute rest.

The young man was thus compelled to retire without

giving his partner the explanation he had brought with him. But this explanation he hastened to give the public, and without delay he sent it in the form of a letter to the newspapers.

This was the letter :—

“MR. EDITOR,—

“It seems that people are in a great hurry to believe and to say that the tube through the Atlantic is a miserable failure. As a matter of fact, there is no oil passing through at this moment ; but oil did pass through for many hours. It has flowed out at Brest ; that is the essential point. The experiment has sufficed to show that our enterprise is in no way chimerical, and I have never expected anything else but what has happened.

“Nobody could have the right to affirm in advance that the submarine tube would work or not work as an ordinary syphon ; and no one did so. I would remind you of the theoretic objections offered twenty years ago to the subterranean tubes of Pennsylvania, and the notorious way in which facts proved them to be erroneous. That is why people said nothing, and why I said nothing about my doubts.

“But the present difficulty in satisfying the doubts does not imply final failure.

“What is required for the work of the syphon, now

intermittent and imperfect, to become permanent and regular ?

“Simply a sufficient propulsive force brought to bear on the liquid in the tube.

“To overcome the friction along so considerable a length the force must be continuous, powerful, irresistible. We have it at hand.

“It is that of Niagara.

“If the authorities will allow me to apply to such a purpose the enormous force that the great American fall develops to waste, all the petroleum of Pennsylvania will easily flow towards Europe.

“We have the funds necessary for the works. All we are in want of is the approbation of the competent public and the authorization of Congress. Assist us in obtaining both ; it would be much better than hastily judging of a work still incomplete, and which I am firmly convinced will be a fresh source of wealth and prosperity for the world.

“Believe me, &c.,

“RAYMOND FRÉZOLS.”

Published simultaneously at three o'clock in the afternoon by all the newspapers of New York, the appeal immediately produced an immense reaction in favour of the young Frenchman. People admired the suppleness

and audacity of his inventive genius, the scornful calm with which he met the premature critics, and, above all, the grandeur of the remedy he proposed to apply for the submarine syphon's inertia.

To bring Niagara into play to help him was just the idea to please people who are always on the look out for something grand. It flattered the Yankee vanity in all it held dear, and from that point of view was a regular master stroke on the part of the young French engineer against his detractors. Even that very day the local press, always ready to follow the movements of opinion, showed a sudden right-about-face.

"We must confess we have erred," said one of the principal New York newspapers, "and admit we were in too great a hurry to believe in the failure of the submarine tube. Far from being discouraged by the first disappointment, the inventor of this original enterprise has mustered all his courage, and his fertile brain seems to have been inspired with a new prodigy. He proposes to make use of the power of Niagara, and compel it to drive through the syphon the oil which refuses to flow spontaneously. The idea is one whose audacity and grandeur cannot fail to be fascinating to the imagination. We sincerely wish it may be found practicable. For thousands of centuries these hundreds of thousands of tons of water which make the prodigious descent have only served to cut back the chasm

in which they fall ; it would be worthy of our times, so fertile in industrial miracles, to employ this dead weight in pouring out over the old world a flood of latent force under the form of the most recently discovered mineral wealth of the new. Taught by the lessons of the past, we refrain from predicting an infallible success for the splendid conception which has thus been grafted on the primitive plan. We will wait for more complete details before we commit ourselves to a definite opinion. It is enough for us to-day to say that the conception is noble and grand, and that it is truly American in its bold simplicity, and that all true Yankees would be pleased to see it realized."

Amid this concert of sympathetic hope there was only one note of discord. It came from Curtiss House. Raymond's letter had put the household there in a flutter. They had begun by making fun of the notion as being too ridiculous. Madge, who had a fine ironical gift when she chose, spoke of it as "putting Niagara into a bottle," which was much the same as putting it into a syphon. Mrs. Curtiss considered it simply monstrous, after throwing away five millions, to speak so easily of getting rid of the sixth.

But Ebenezer, who rapidly got better, and was able to read the newspapers, at once took the popular side. Not only did Raymond's idea appear to be sound, but it was easily realizable, and without any special act of Congress.

The petroleum king knew this for certain, as a sleeping partner in a canal on the American side of the river Niagara which already furnished driving power to a score of mills and manufactories. For authority to use the power of the cataract all that was wanted was the permission of the Governor of New York State.

The river Niagara is, as we know, a torrent thirty-five kilometers in length, putting Lake Erie in communication with Lake Ontario, and forming the line of demarcation between Canada and the American Union. The difference of level between the lakes being 105 meters, the fall of the stream is very rapid, and in its course are the two most majestic cataracts in the world. These two waterfalls are that on the western side in American territory, 350 meters broad and fifty-one meters high at its centre, and that on the eastern side, the Horseshoe fall, 633 meters wide and forty-eight meters high, between the two territories. The frontier line drawn by the Anglo-American Commission runs through its centre.

The only question in Ebenezer's mind was whether Raymond intended to use the mechanical power developed by the western fall. If so, nothing was easier.

To be quite clear on this point, he sent to Raymond to tell him that he was now sufficiently recovered to receive him, and Raymond immediately betook himself to the

convalescent's room and gave him the necessary explanations.

"In the first place," he said, "allow me to express my regret at not having communicated to you the doubts with which I was assailed. These doubts arose in my mind during the course of the works, and the idea that a syphon like ours would not behave like an ordinary syphon did not at first strike me. When I conceived the notion there was no practical use in informing you, for great expense had been incurred, and I had hopes that after all there would be nothing in my doubts, because exactly the same thing had been said of our subterranean pipes. I therefore waited, convinced that experiment alone could decide the question, but at the same time prepared for the event and seeking a remedy if by chance the syphon refused to work by itself. That is how I was led to think of a propulsive force enormous, continuous, regular, and as much as possible gratuitous. I thought of Niagara. And I economized wherever possible in our expenses so as to have a reserve for supplementary works. That is to what my efforts have tended, and that is why I am in a position to tell you to-day that nothing is lost, if you will consent to go through with the scheme and devote to it the whole of the capital you agreed to."

"I have no right to do otherwise," said Ebenezer, anxiously, "but that is not the question. What I

want to know is how you intend to make use of Niagara?"

"In the simplest way in the world, just as if you were to turn a mill-wheel, or, if you prefer it, the wheel of the engine at Marly. You have heard speak of the hydraulic apparatus established at Paris, on the Seine, by Swalm-Renkin, of Liège, called Rennequin Sualem, and which brought every day 11,500 hectolitres of water at 154 meters of elevation for the service of King Louis XIV. This apparatus was replaced in 1825 by a steam-engine which has since been improved—but that is not the question. What the Marly machine did two centuries ago for the water of the Seine we can accomplish at Niagara for the Pennsylvanian petroleum. Instead of driving the water up an almost vertical conduit to make it climb a hill, we will make it drive the mineral oil along an inclined plane to make it travel a considerable distance, but in the direction of the weight. You see there is nothing alarming in the proposal. A very small part of the power developed by the American fall will be capable of giving us the work required. All we want is the right to canalize a sufficient volume of water, and to use this water to work the pumps which force the petroleum into our tube. If the petroleum does not flow out except into France, it must necessarily get there!"

Raymond pronounced these words with so much conviction that Ebenezer felt himself reassured.

"My dear boy," he said, with a sigh of relief, "this is the first moment of joy I have had for two days! I thought my capital all gone! But enter into details. Give me an idea of your plan."

The young man explained that his plan comprised two series of new works. In the first place, the diversion of the waters of the western arm, immediately under the fall, into a special canal, and then the construction of the machine destined to transform the speed of the waters into a movement of propulsion. To do this a series of paddle-wheels would put in action a series of pistons, which would force the oil, by several strokes of the pump at a time, into a principal subterranean conduit in communication with the transatlantic tube.

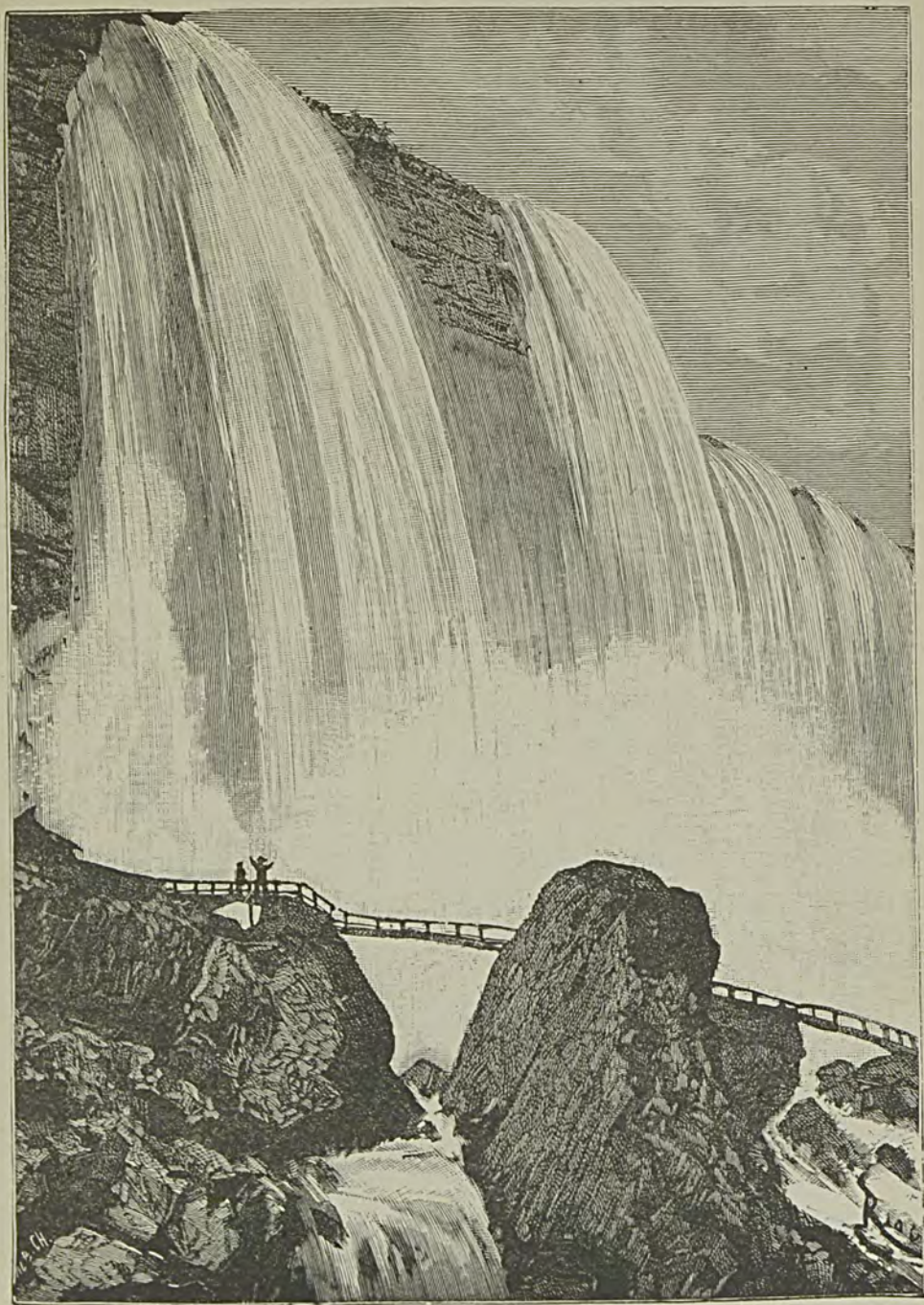
It was therefore necessary to construct on the bank of the Niagara river a new reservoir to receive the petroleum from Drill Pit. Fortunately the distance was only twenty kilometers. As to the New York petroleum, Raymond hoped that the force of propulsion impressed on the mineral oil would be enough to sweep along a secondary current starting from Far Rockaway for the syphon. If his hopes were realized, the first reservoir could be retained and utilized; but on this point, as on many others, they must trust to experience.

In support of his explanation, the young inventor produced a portfolio of working drawings and estimates, which proved one thing unmistakably—that for many months he had seen what might happen, and had neglected nothing to be prepared for it.

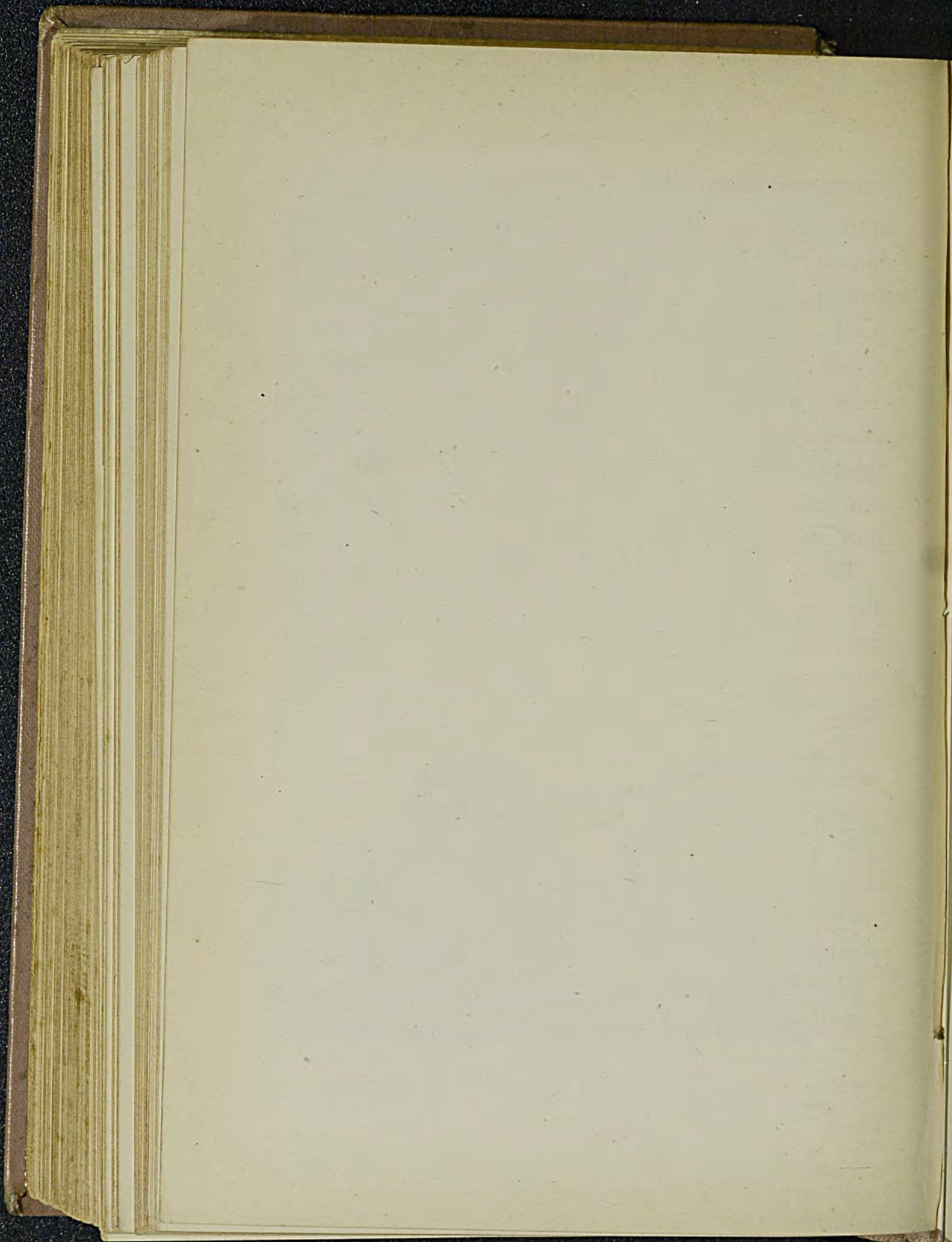
Ebenezer was so satisfied with all he saw that his malady was suddenly cured as if by enchantment. He declared that he would have no more doctors, and would start with Raymond for Niagara next morning. But in the first place he wanted some dinner, and he would have beans and bacon, as at Drill Pit, let his daughter and the French cook, and the gentlemen in livery, say what they like.

Every one was glad to see him on his feet again. Mrs. Curtiss opposed but a feeble resistance to his different wishes. She had little cause to regret it, for Ebenezer was in excellent condition next morning, and rose fresh and cheerful, and quite ready for his journey.

Raymond and he took the railroad, and in a few hours were at the foot of the famous falls. They both knew them well, for they had often visited them ; but never had they felt such emotion as then. It seemed to both that for the first time they understood the overwhelming beauty of Niagara. The thought that they were going to use the permanent cataclysm as if it were a tool, filled them with a kind of religious fear. But at the same time the vastness



At the foot of the famous falls.



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of the mass of water which was hurled into the abyss, the majesty of its prodigious power, the terrible roar which accompanied it, the furious raging of its whirlpools, the shaking of the soil two leagues around, the cloud of diamonds that rose above the cataracts of all the colours of the prism, as if to adorn them with an eternal rainbow and endow the spectacle with something supernatural and superhuman, all combined to give the two voyagers the conviction that in calling to their aid this irresistible power they could not do otherwise than succeed.

The more the monster astounded them by its grandeur, the more it gave them confidence by its power. It was because they felt themselves so small in the presence of this Jupiter Thundering that they felt sure of victory in calling him to their aid.

After passing several hours in contemplating it under every aspect, they went to refresh themselves at the hotel, where the widow of the Captain Webb who died in trying to swim the whirlpool, sells to visitors the portrait of the heroic and unfortunate swimmer. Then they started out to fix on the site of the canal which they intended to erect on the American shore.

The site was soon chosen. The canal would start from a small creek situated about a kilometer down the western arm, in which the furious waters struck the bottom, writhed like snakes, and shot off with staggering rapidity.

The canal, forming a half circle of about three thousand meters, would rejoin the bed of the Niagara, and restore its waters, after having turned a score of waterwheels driving an equal number of colossal pumps.

A huge reservoir dug under these pumps, and communicating direct with the general dépôt at Drill Pit, would keep them fed with petroleum, which, from their steel cylinders, could be forced into the secondary branches of a main subterranean tube, equal in diameter to the syphon through the Atlantic.

Raymond indicated the chief lines of the project on a map of the district he had been careful to bring in his pocket. This trace he would develop on to a proper working plan for submission to the governor, and to obtain his approval of the works. And Ebenezer managed to obtain this in three days, so energetically had public opinion pronounced in favour of the scheme.

His young partner had now only one fear. Would the submarine tube support the formidable pressure of a mass of liquid driven at the speed he foresaw, without being able to measure? Everything depended on that. Once more experience only could decide. All he could do was to wait, or rather to hurry on the day of settlement.

CHAPTER XIII.

THE SUPREME EFFORT.

RAYMOND did not spare himself, and in less than a fortnight all the supplementary works were in hand. As he had hoped, Ebenezer easily obtained the necessary authority for diverting the waters of the Niagara on condition of paying the State of New York an annual rent. A careful study of the estimates showed him that the total cost of the buildings and machinery would not amount to a million of dollars, but that it would take two more to excavate the canal, and that obliged him to mortgage his wells ; for everything has a bottom in this world, even the purse of a petroleum king.

What with losses on the exchange, domestic expenses, and the amount spent in establishing the tube through the Atlantic, he had got rid of sixty millions of francs during the year.

" Luckily that will return at the gallop as soon as the tube is in full work ! " he said to Raymond, when he told

him of the fact. "He who risks nothing has nothing, and my plan has never been to keep my money in an old stocking. It is flat, they say, and ought to be piled up. I say it is round, and ought to be kept rolling."

And Ebenezer's money certainly did roll. It rolled with Madge, it rolled with the peach-bloom footmen, it rolled with the submarine tube, it rolled with the Niagara; in fact it rolled in such a way as to quite alarm Jacob Freeman. That trustworthy man remained alone at Drill Pit to manage the business, and found himself from day to day face to face with such totals that positively the little hair that was left him stood on end.

"But, at any rate, there are the wells!" he would think as some consolation.

But just as Ebenezer had obtained an advance from the General Bank of New York of two millions of dollars on Strawberry Grove and the Williams, the yield of these two wells greatly decreased without any intelligible reason. Recourse was had to nitro-glycerine, which, for a few days, brought oil in floods; but the daily yield began to drop again, and it became evident to Ebenezer that the two chief sources of his income were dying out.

This did not disturb him, as his custom had always been to push on and trust in his luck. But, at all risks, he gave orders to begin, without delay, to bore thirty more wells on ground he had good reason for believing petroliferous.

This was a new drain on the purse, and made Jacob Freeman lift his arms to the skies.

"As if there were any sense in going in for new borings!" he said, as he jotted down the figures. "I should have waited at least till I was out of this cursed tube."

But Ebenezer would have his own way, and to hide from himself the perilous position into which he had insensibly slipped he still further increased the extravagant luxury of his mode of life. His carriages had never been more splendid, Madge never had more diamonds or gowns from Paris than during this winter.

Her relations with Raymond had entered on a new phase since the "inveigling of Niagara," as the American journals called it, occupied the entire world. For many weeks nothing else was talked about even in the most select circles. Madge, who at first had only accorded disdainful and ironical attention to the scheme, changed her attitude when she heard it enlarged upon and passionately discussed around her. How could she avoid talking of what all the world was talking when she was one of the world? They are subjects of conversation other than the newest fashions, and it is impossible to avoid them. Raymond could not have helped being surprised had he heard Madge discussing the Niagara affair *ex cathedra*, and even boasting of having heard of it first, and affecting opinions which she was very far from expressing at the beginning of the enterprise.

But this was not quite all pretence. In the eyes of the young American success atoned for everything. From her infancy she had seen this god sacrificed to, and if now and then the impulses of a generous nature were not in accord with this religion, the influence of her surroundings soon brought her back to the feet of the idol she had always worshipped. In her eyes wealth was the true sign of success; on that point she had no doubt whatever. She could feel obscurely the merits of Raymond, but never would she be capable of recognizing them before they were proclaimed by the crowd; or, at least, before that came about her whole being would have to undergo a transformation. What reverses, what disappointments, what real suffering would she have to experience before she would think for herself, and shake off the paraphernalia of vulgar prejudices which deformed and marked her good qualities! And for the moment that conversion was a long way off.

She began then to feel for Raymond a sort of respect; but this respect was not on account of himself, his generosity, his intelligence, or the straightforwardness of his character. No! It was not what she saw in him, but that the world agreed to recognize his existence, that his name was on all lips, and that at twenty years of age he was a partner in an enormous industrial affair.

"In six months that boy will be worth two millions of dollars," she heard people say around her.

And taking it for granted, she repeated it freely, believing in all sincerity that though Raymond was not "worth" the two millions then, he had a very good chance of being worth them soon, and that this gave him a title to a certain amount of consideration.

She made so little mystery of the principles that guided her conduct that the young Frenchman could hardly be ignorant of them, and at times he hardly knew if he should laugh or cry over it. He who had always considered fortune as a means not as an end, could scarcely conceal a gesture of repulsion when he saw young girls showing the greed of Shylock and talking about it high or low with complete imperturbability. But in all that concerned Madge he was too just to hold her entirely responsible for the faults which she had acquired. The more he observed her the more the conviction grew that she was as highly gifted morally as physically, and that all she wanted to become perfect was a change of atmosphere.

Was she not always candid, generous, prompt to recognize her mistakes? One morning when he had unexpectedly climbed the heights of Curtiss House in Ebenezer's company to conduct a little experiment in weight, had he not surprised her looking after tenderly and with truly filial gentleness a poor old woman whom

she had picked up in the road half smashed by a tram car?

Although as regarding the vulgar motives of the favour with which he was distinguished, he could not help experiencing a feeling of secret triumph when he saw Ebenezer's daughter, formerly so indifferent to the transatlantic tube, come curiously and enthusiastically, and recoiling not in the least from the driest explanations, and anxious to be told everything. Numberless were her questions and those of Alice Cooper and others. How could the Niagara, powerful as it might be, have an influence on what took place at Brest? It seemed like witchcraft.

"The Niagara will do its work at one end of the tube, and the impulse it gives will be transmitted by degrees to Brest," replied Raymond, with a smile. "There is the body of a pump which will be worked by that impulse, and it will drive the oil into the tube. The oil will seek a vacuum, and move towards the only place where an opening can be found. Behind it follow fresh quantities of the liquid driven by a similar movement. These quantities will follow incessantly with increasing quickness, and gradually augment the pressure from behind. How can they do otherwise than move on further and further until they reach Val Tregonnec? An accident alone can stop them, and that is that they may find an outlet before they

get there by bursting the tube with their pressure. But a thousand pardons, ladies, for using words which ought only to be heard in the laboratory."

"Indeed!" exclaimed Madge vivaciously. "Do you think we do not know what a vacuum is? Do you know, sir, that Alice and I were always at the top of our physics class? So mind what you are about!"

And Raymond, enchanted with his audience, gave them all the details they wished. He was always understood. Madge in no way exaggerated in affirming that her scientific acquirements, and those of her friends, qualified her to understand all the explanations.

This circumstance rendered more singular the habitual futility of their lives. All had been well educated, better educated in many respects than the majority of their brothers, or other young people in their circle. But, strange to say, once this education was terminated and the certificates obtained, they closed the books and bade adieu to algebra, to give themselves over, body and soul, to rubbish. But, fortunately, that did not prevent their retaining a few notions of physics, to be of use when required.

"Bravo!" said Madge, clapping her hands. "It is superb, titanesque, this utilizing of the Niagara! Find in fable anything grander if you can. But here is the material!" she added, with patriotic pride. "America alone possesses a Niagara."

"Do not forget that the subduer of the monster is a Frenchman!" said Alice Cooper, laughing.

"I do not forget it, and I know how to render homage to other nations. But I confess they appear all paltry by the side of mine. The old world seems very small and stunted. When I think that a man, to be a great proprietor, need only have two or three hundred acres, that a man can be called rich who has only twenty or thirty thousand dollars, I feel quite proud at seeing our estates as large as an English county, our colossal fortunes, our indomitable speculators, and our rivers and forests proportionate to our industrial power."

"You are becoming quite lyrical!" exclaimed Alice.

"Remember," said Madge, without listening to her, "that in my childhood they taught me the history of France and England. I was pained to find that these two nations have done great things, while America had no history. But I was consoled by discovering what little strips of water were their most celebrated rivers, the Seine and the Thames, for example, by the side of the Mississippi."

"You give an extreme importance to mere bigness," said Raymond.

"And why should I not? I admire big enterprises and big successes in a money-making sense. You, Mr. Frézols,

who are engaged in a colossal affair, you ought to find the feeling legitimate."

"I may find it legitimate, but only in a certain measure. If you love success for what it represents in effort, intelligence, and sacrifices, nothing can be better. If you love it for itself, for the dollars it brings, I should say it was quite a mistake, though a common one, and decline to admire it."

"Who asks for your admiration?" said Madge haughtily.

"Good! Now you are going to quarrel!" said Alice.

In fact, it was seldom that any conversation whatever between Madge and Raymond did not end in a quarrel, avowed or disguised. The young Frenchman, as we know, had often had to complain of Miss Curtiss's conduct in this respect. But he could not help being interested in her, welcoming with pleasure her graceful advances, and seizing his opportunities of correcting her superficial faults. Madge, for her part, found it intolerable that any one should pretend to reform her. And, as often had happened before, she went off in a huff.

"I hate people who are always moralizing," said she to Alice. "Do you not think it is a detestable task?"

"But what did he say that was so extraordinary?"

"Oh, I understand his insinuations. It is not the first time he has served them out to me. He thinks I am vain,

pretentious, and mercenary, and he gives me to understand it every time he gets a chance."

"But, my dear, he is much attached to you; all the world notices it."

"I hope he will not take such a liberty!" said Madge, with a certain display of dignity.

"Good! Again you are on your high horse," said Alice, laughing. "No one knows better than you that he takes the liberty, and no one is more pleased at it."

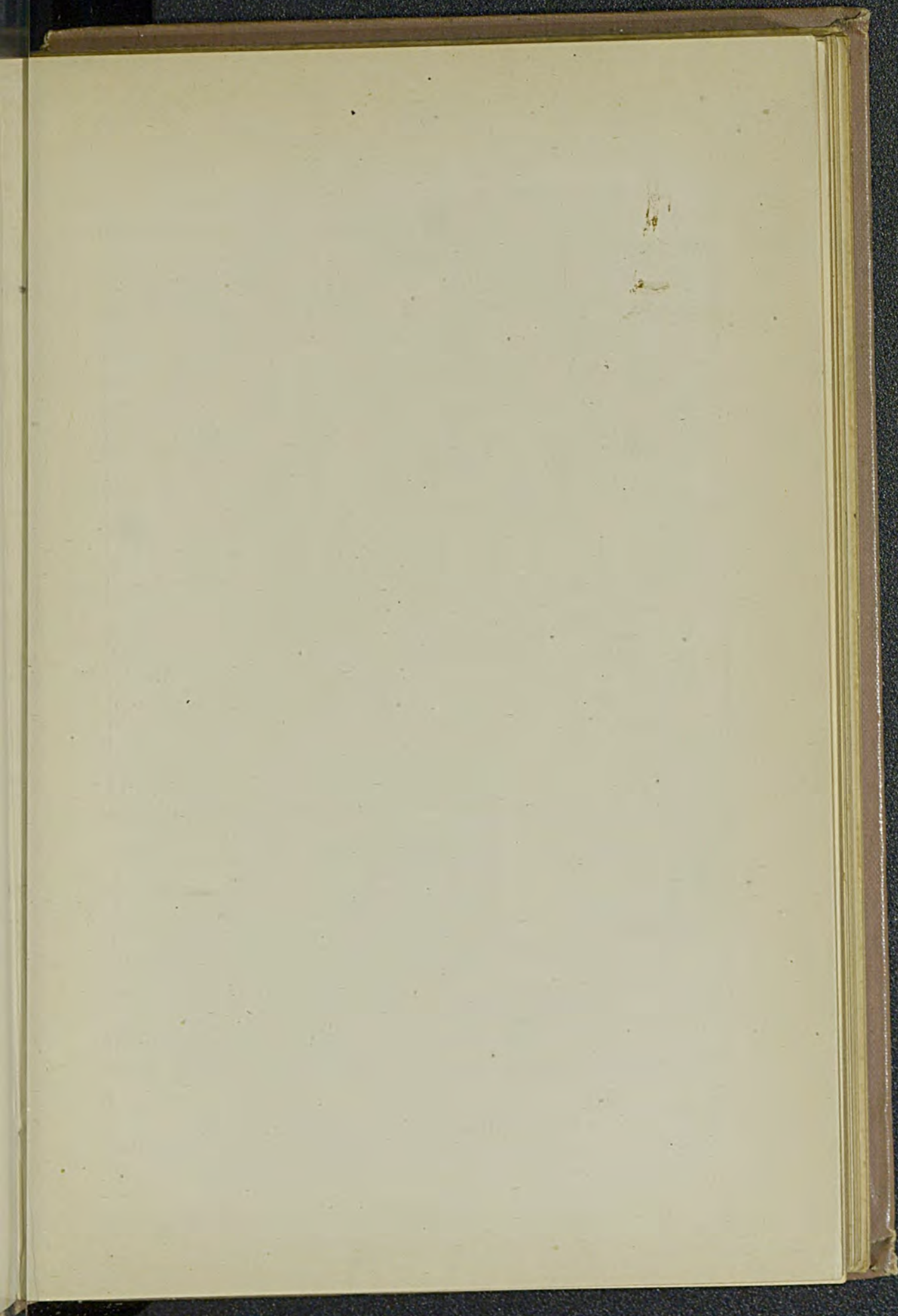
Then, becoming serious, she continued,—

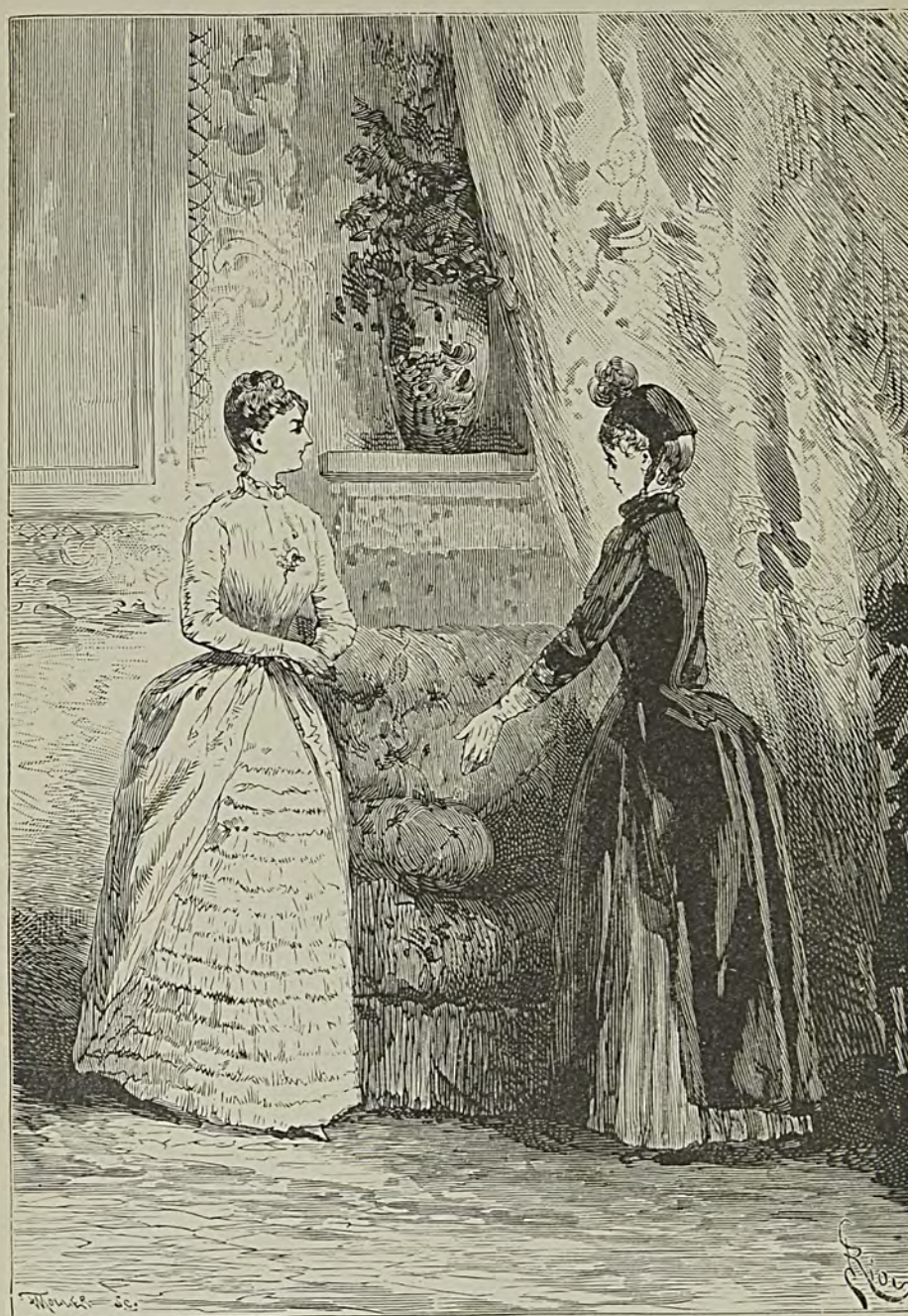
"My dear, if I have any advice to give you, it is, do not repel him. He is not one of those with whom you can play with impunity. Take care—"

"Take care? Of what, pray? Do you think I respond to the sentiments with which you credit him?"

"Yes, I do."

"Well, if so, so much the worse for you!" exclaimed Madge, in a resolute tone. "I can tell you, in all sincerity, that I have done nothing to attach him to me. And as for me, it never entered my head to consider him as a suitor. Would you have me marry this little mechanic, even if he succeeds in his projects and makes his fortune? No, my dear. In the first place, I am not yet ready to put a chain on my independence; I must travel; I must see the world. If it comes to me to take a husband, I shall choose one in a higher sphere than that of petroleum."





" I suppose there are some real princes ? "

Page 185.

"Say at once you would like a duchess's coronet!"

"And why not, if I am offered one? Thank Heaven! we have the dollars to buy one. Esther Kerley, whose fortune was made out of salt pork, has married a baronet—"

"Yes, and Jane Fowler married a Neapolitan prince, to discover, at the end of three months, that his principality was quite imaginary."

"She made her inquiries badly. But I suppose there are some real princes?"

"Hem! Hem! Not many! And they are not often found walking about in America!"

"Well, we will have a look for them where they are found, if our heart tells us so."

"A pleasant journey to you, princess!"

"Good-bye for the present, dear Alice."

All the winter Raymond Frézols was hardly seen at Curtiss House. He devoted himself entirely to his work, and did not leave the Niagara, unless to visit the contractors and urge on the hydraulic machinery.

The works advanced rapidly. By the end of March all the heavy work was finished, the canal dug, the new oil-reservoir connected on one side with the depôt at Drill Pit, and on the other with the submarine tube.

A month later the pumps and water-wheels were in position. These wheels, working independently, ran with great ease on their steel axles, and could be lowered into

the current that would put them in action, or be lifted above the surface of the water. It was well that Raymond had thought of this precaution, for it was inevitable that they would be driven at high speed and require continual repairs. As far as the speed was concerned, when the lock-gates were opened to let in the Niagara, it was so great that no instrument known could have determined it the first day. To the eye of the spectator, each wheel formed only a circular line turning on its own axis with vertiginous rapidity, and driving the pumps with perfect fury.

Fortunately, all this had been foreseen, and the cylinders and shafts and pistons, like the floats, had been made strong enough to stand the power ; while exceptional means had been adopted to keep them at normal temperature. In short, the most minute precautions had been taken for everything to proceed without a hitch ; and after two or three weeks of trials with the exhausters, and final rectifications and adjustments, the day came for the decisive experiments.

The day fixed was the 25th of May. It was an important day for Ebenezer Curtiss. He was so deeply committed to the enterprise that his whole fortune depended on it. If the result were favourable, Ebenezer would remain more than ever the wealthiest man in Pennsylvania. On the other hand, if the submarine tube were not equal to its task, it would be a disaster—a catastrophe—the extent of

which none could measure, for the mortgage on the wells would probably exceed the value now that the yield was diminishing. Not only would Ebenezer lose all at a blow, but there was every chance that he would have to declare himself bankrupt.

It was a strange thing, though quite characteristic of his temperament, that, far from being anxious about so terrible an eventuality, he rejoiced in the position, and spoke with a gambler's vanity of venturing seventy millions of francs against the chance of tripling them. If any one had told him at the outset of the enterprise during the excursion on Yellow River, that things would ever come to this pass, he would have refused to believe it. And yet within the eighteen months he had become committed beyond the limit foreseen by Raymond and by himself.

But such was his confidence in his star, or, as he said, such was his stomach, that if the day before the decisive one a proposition had reached him to share the risk on condition of sharing in the profits, he would have declined it.

And this very thing happened. The Transit Company, alarmed at the danger to its shareholders to be feared from the rival enterprise, made a proposition to be admitted to the business. But Ebenezer would not hear of it. He declared he was strong enough to carry his tube himself, and that he would never work for another.

Raymond had no doubt of success if the tube remained in good condition. But during this long winter so many dangers might have assailed it. Even a sword-fish piercing it would make a breach in it. And a breach, however small, on one single point of that immense length, would ruin everything. When he thought of these things he trembled, not for himself or his glory, but for his partner, and especially for Madge. He asked himself how he came to conceive an idea so hazardous, and to put it into execution. He said to himself that he had no right to make such experiments, except with his own money. And he saw Ebenezer ruined, Madge reduced to abandon the luxury to which she was accustomed, and which became her so well.

But soon he would drive away such lugubrious visions, and, with a shrug of the shoulders which was familiar to him,—

“What does it matter?” he would say. “I will work for them, and with such good heart, energy, and courage, that we shall conquer fortune at last! But we shall succeed! It is necessary that we succeed, and we will!”

CHAPTER XIV.

THE VICTORY, AND WHAT FOLLOWED.

HURRAH! Hurrah! The oil is pouring in a stream into Val Tregonnec—this time without any possible mistake or miscalculation. All Raymond's hopes are not only realized, but surpassed. The Niagara is driving the oil through the tube with irresistible force; and the power transformed into speed by the narrowness of the tube, produces an unexpected result. The petroleum passes through the Atlantic in six hours fifty-two minutes and eight seconds.

The nature of the liquid lubricates the works of the tube, and facilitates the flow; the initial force is enormous, and continuous in its action; the form and inclination of the syphon lends itself easily to the transport of a heavy, mobile liquid; all these elements united produce the miracle.

And now that it is accomplished; now there is no room for doubt; now that the telegrams from Brest bring hour by hour the cubage disgorged by the transatlantic tube

and the storage reservoirs on the American side show a corresponding sinking of their levels, every one thinks it such a simple matter, and sapiently declares that it could not be otherwise. How could petroleum incessantly pushed from one end, do otherwise than arrive at the other? Either it must burst the tube or pass along it. And there was no reason why it should burst the conduit if it had a free passage through its length. A charge of powder does not burst a cannon when it drives the projectile before it. And the tube through the Atlantic is much stronger than one at first supposed. Besides the metal frame and the surrounding gutta-percha, was it not surrounded by a casing of sea of immense thickness pressing on it uniformly at every point, and strengthening it in formidable proportions. The miracle would be, not that it should be strong, but that it should not be strong, etc., etc.

And when the thing was done, thus philosophized the people, who a few months before had proved to their own satisfaction that it was impossible. The newspapers were quite excited in their expressions of enthusiasm. Raymond Frézols had suddenly become their hero, or rather their idol. They gave him biographical articles, published portraits of him resembling each other in no respect, related all his sayings and doings, and besieged him morning and night for new particulars.

An article in the *Leviathan Courier* went the round of the American press. It was as follows:—

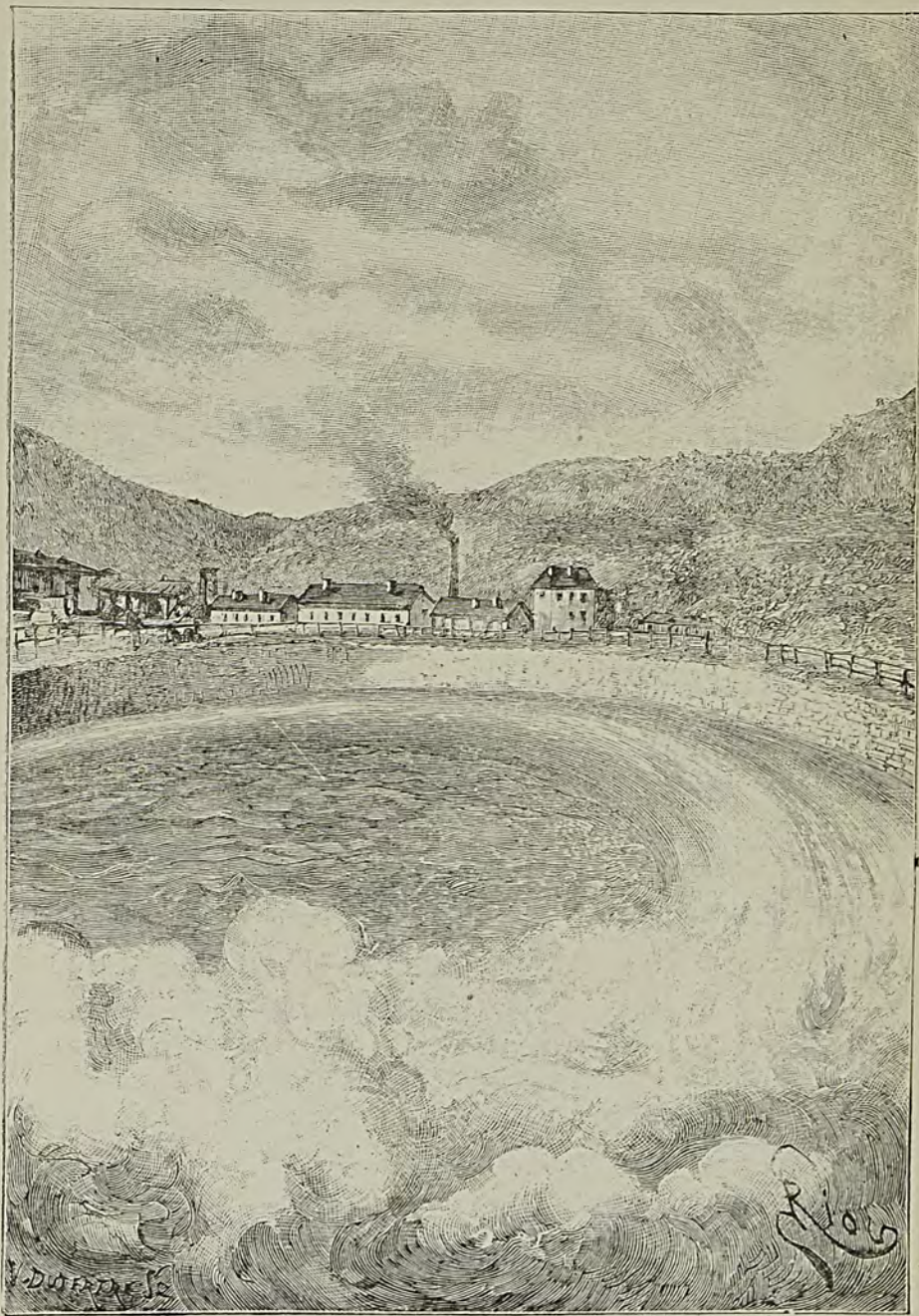
“The secret of the decisive experiment on the transatlantic tube had been well kept, and all our contemporaries had been thrown off the scent by the news designedly spread that it had been postponed for a month. But the *Leviathan Chronicle* is not easily misled when it can provide news for its readers. One of its most active representatives, commissioned to keep an eye on the development of this great industrial enterprise, had succeeded, a fortnight ago, in obtaining employment at Far Rockaway as a stoker and greaser of the machinery. Perfectly begrimed and disguised, thoroughly up to his duties after an apprenticeship of five or six days, he played his part so well that no one about the works had the least suspicion of his real character. In this way he secured daily access to the works, for the press, like the public, was rigorously excluded for eight days beforehand. Messrs. Frézols and Curtiss, for reasons easily intelligible, desired to conduct the first trial without witnesses, so as to be able to remedy any imperfections in peace if such showed themselves before the public and official inauguration.

“The trial took place yesterday morning. For several days the Niagara machinery had been in motion pumping into the conduit to Far Rockaway a flood of petroleum, estimated at three hundred tons a minute. On the other

side, the engineers at Val Tregonnec, near Brest, on French territory, had received orders to start their pneumatic machines, so as to form a vacuum in the submarine syphon. The results of the trial were awaited with lively impatience. According to the progress of this rarefaction of the air, it would be seen if the syphon had continued in good condition or not. A few hours sufficed to dissipate all anxiety on that score. The first day the manometers at Val Tregonnec showed a sensible rarefaction, and this rarefaction showed itself next morning in the manometers at Far Rockaway. At the end of a week it had reached its extreme limit.

"Immediately the signal was telegraphed to the Niagara works to set the pumps going, and as soon as their effect was apparent at Far Rockaway, the stopper of the submarine syphon was unscrewed. At the same time a telegram announcing the commencement of operations was sent to Val Tregonnec. This was at twenty minutes twenty-three seconds past ten in the morning.

"The afternoon passed in anxiously waiting. It could be seen that the operation was proceeding satisfactorily by the enormous quantities of petroleum arriving from Niagara being regularly engulfed in the transatlantic syphon at the prodigious speed with which they had been driven. The speed had not been measured, but in the opinion of the foremen at the reservoir, it was enough



The stream of oil forms a whirlpool.

to take the oil across to Brest in twelve or fifteen hours.

"The result exceeded all hopes. At seven minutes thirty-one seconds past five that evening, the cable brought the message from Val Tregonnec: 'The oil is arriving.'

"That is to say, in six hours twenty-two minutes eight seconds—twenty-three times as fast as any steamboat—the Niagara had crossed the Atlantic with the first stroke of its pumps.

"Mr. Frézols himself was so astonished at the news, that he immediately asked for its confirmation, adding that he wished to be informed every quarter of an hour of the progress of the operation.

"He had not long to wait for the confirmation, which was followed immediately by this characteristic detail,—

"'Oil is arriving with such force, that in rushing from the tube it has excavated a trough in the artificial lake. You would think that Niagara in miniature had been transported on to French soil.'

"And a few minutes later,—

"'The stream of oil forms a whirlpool in spouting round the artificial lake, boiling with fury, and spreading out only after making a completely circular course.'

"After which, shorter despatches arriving every quarter of an hour left no doubt that everything was going as well as could be wished. Messrs. Frézols and Curtiss were

wild with delight. They ordered champagne all round, and the representative of the *Leviathan Chronicle* drank to the health of his absent colleagues of the press.

"But another experiment remained, and that had a closer interest for our reporter, owing to his having to play a part in it. It was required to know if the Far Rockaway oil flowing into the main current from Niagara by a branch would be swept on at the same speed. At seven o'clock precisely the steam-engine put the pumps in motion and drove along the tube a column of petroleum twenty centimeters in diameter. Immediately it was seized and borne along by the current, and mingling with it, rushed at high pressure towards the French coast.

"The intervention of this supernumerary current had not the least effect on the working of the tube, at least nothing was heard about it from the observers at Val Tregonnec.

"The proof could thus be considered conclusive. At one o'clock in the morning Messrs. Frézols and Curtiss, overwhelmed with fatigue by the emotions of this glorious day, prepared to seek well-earned repose. It was then that the representative of the *Leviathan Chronicle* seized the moment to introduce himself to them under his real name. We know already how during the day he had, with the aid of pencil bulletins, thrown over the wall to our trusty emissaries, kept the journal and its innumerable readers informed of the progress of events. 'Gentle-

men,' he said, advancing towards the originators of the tube through the Atlantic, 'I have a confession to make, and an apology to offer. I am not a working stoker, and my name is not Billy Jones. I have the honour to be a reporter on the *Leviathan Chronicle*, and I introduced myself here with the sole object of acquainting our readers with what was going on.'

"Mr. Curtiss, we ought to say, showed signs of not accepting the explanation in the spirit in which it was offered. But Mr. Frézols took it very pleasantly. 'My word, sir,' he said to our reporter, 'I should never have doubted your real character when I saw the consummate ability with which you greased the engine. If you like to remain with us, we will cheerfully double your salary!'

"The representative of the *Leviathan Chronicle* declined, as he was obliged to, the flattering offer, and retired profoundly gratified at having fulfilled, to the best of his ability, the modest mission which he had marked out for himself, that of being in all places and at all times the best informed of reporters."

This article and twenty others carried to all points of the compass the news of the victory which had crowned so much thought and trouble. Ebenezer, at a bound, had become the petroleum king without a rival. His sovereignty none could contest. As he said to himself, not without a little internal shiver, which was not without its

charms, the question the night before had been for him, "would he be ruined if the tube failed, or become the undisputable petroleum king if all went well?" Fortunately the tube had done the right thing! And he had only to await for the usual reward of industrial success. Companies offered to rent the submarine tube. Syndicates of bankers proposed to divide it into shares and to assign to the initiators ten times the amount of their expenses. Others applied for the concession of the subterranean network putting Val Tregonnec into communication with Paris and all the cities of the old continent. In dithyrambic phrases there was celebrated the importance of this great industrial triumph from an American point of view, and in this direct communication established between New York and Brest there was professedly discovered the aurora of an era fertile in new surprises and unpublished miracles.

Amid the booming of glory that rose around him, Raymond was silent and sad, because it did not bring him the only prize he cared for, the favour of Madge. It was a strange thing that this brilliant triumph, instead of bringing them nearer together, seemed to have cleft a new gulf between them.

On his part he showed a delicacy in not thinking too much of it, and not letting it be seen that he considered he was any more worthy of Miss Curtiss than before his success. She, since Ebenezer's position had become quite prepon-

derating on the New York market, seemed to think that nothing was too good for her on the new continent. She criticized all, despised her usual circle, and dreamed of nothing but voyages round the world, a stay in Paris, and luxurious festivities in a position for which she was so well fitted.

"One can only live decently in Europe," said she to her friends. "We Yankees have no traditions, and are but savages after all. The further I go, the more I see it. Our elegances are only reflections and imitations. You must live in Paris to have the real article, and to acquire the true tone of good company."

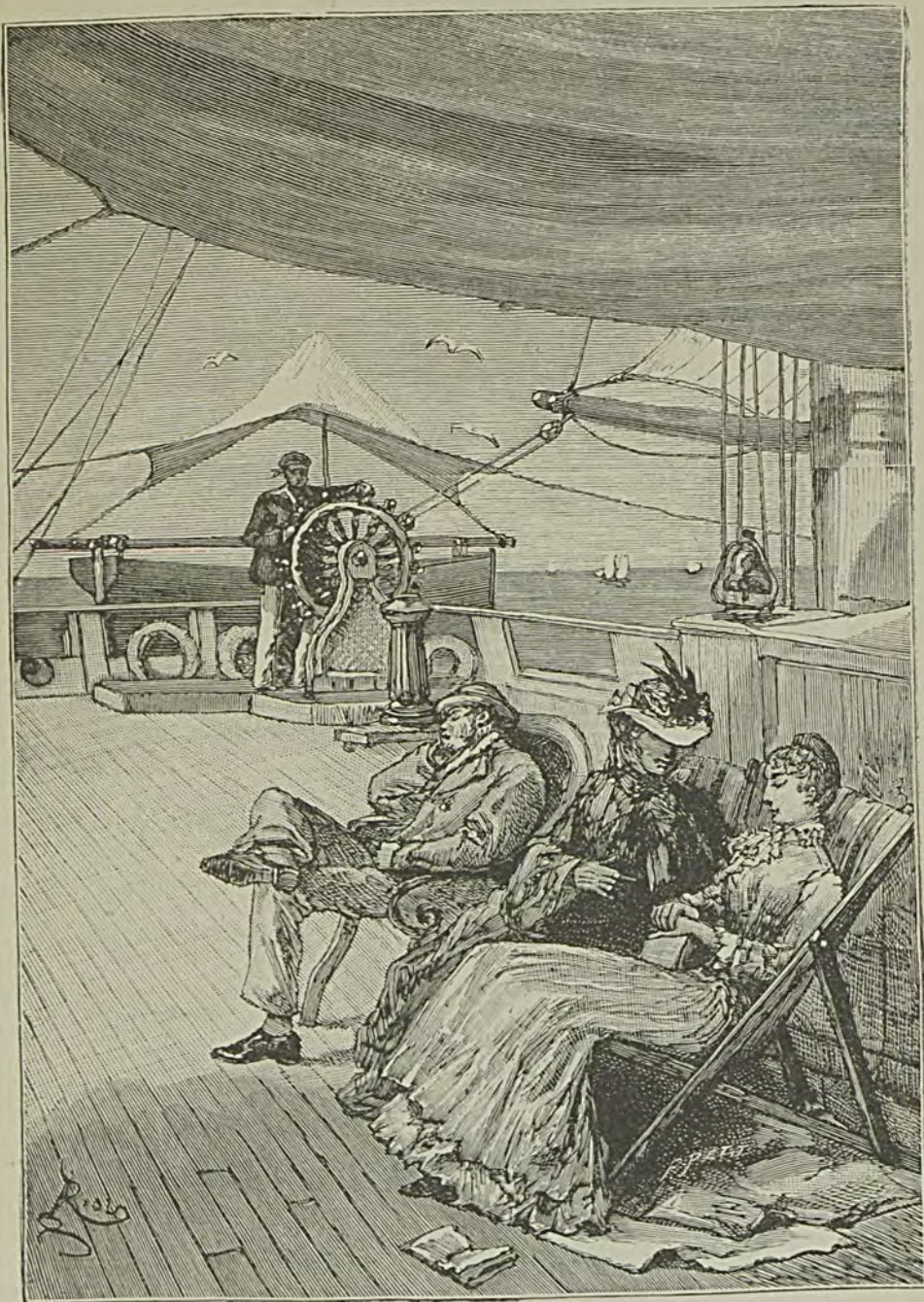
She said these things to humiliate the Knickerbocker people, who affected to treat her as an upstart. But by constantly repeating them, she ended in believing them, and the result of her meditations was that one fine day she persuaded her father to buy a princely yacht, the *White Witch*, that a young English nobleman had ordered to be sold at New York. And once the yacht was bought nothing was thought of but starting for Europe. The necessity of visiting Val Tregonnec, and inquiring into the developments on the old continent of which the oil enterprise was susceptible, served as Ebenezer's excuse for complying with his daughter's wish.

"I cannot," he explained to Raymond, "come to any conclusion here on what ought to be done until I have

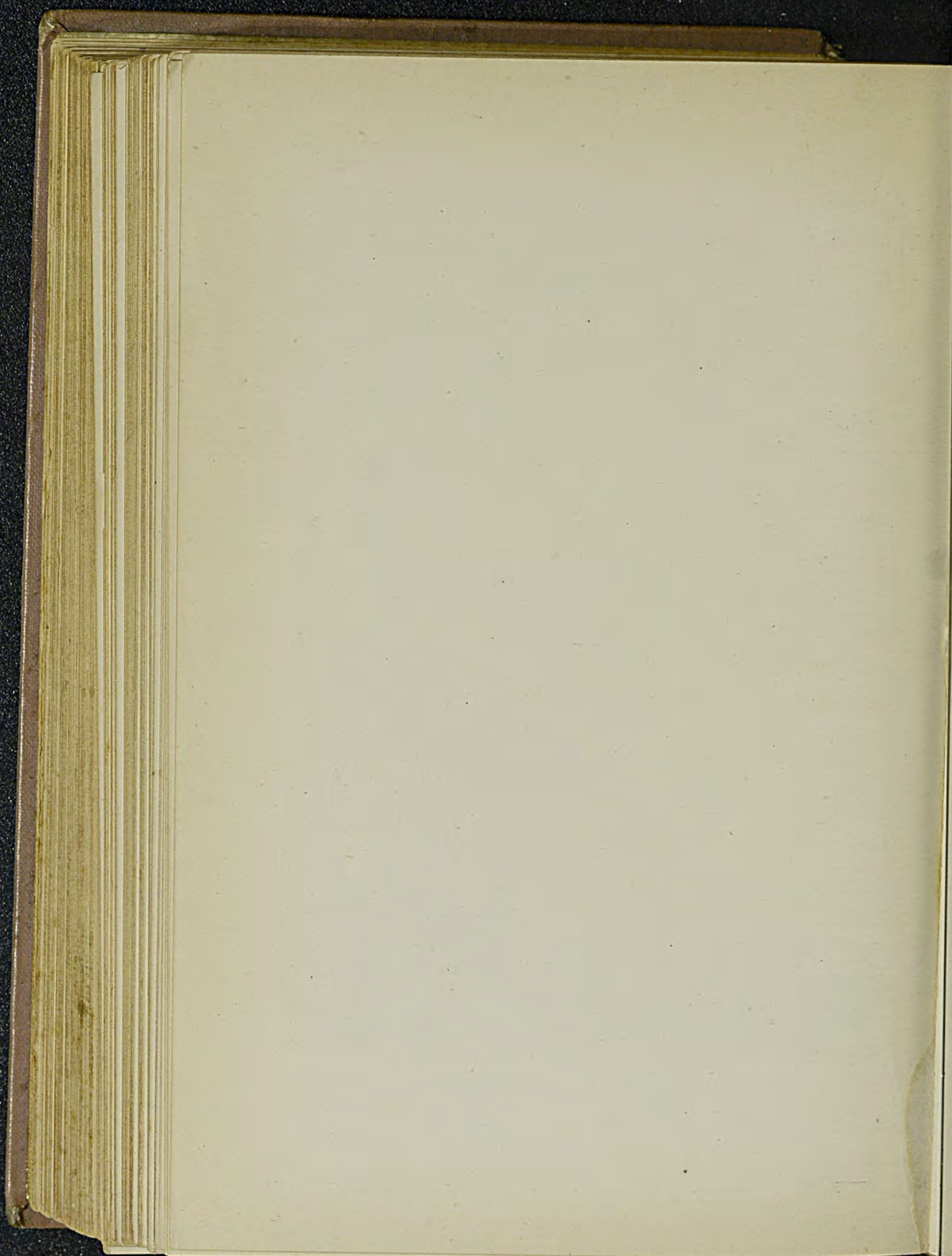
seen on the spot at Paris and Brest the actual conditions of the affair. Would it or would it not be better for us to restrict our business to the transport branch only? That is what I have been troubling about, and the best thing to do is to study the question thoroughly. I can find plenty to do while you remain here and superintend and improve matters if you can. Jacob Freeman will remain at Drill Pit in charge of the dépôt. I can leave you without any anxiety. On my return we will come to a decision on the course to be pursued. For the present we will be content to send the oil to Europe on the same conditions as the Transit Company, that is to say, by warrants from the dépôt against negotiable receipts."

Raymond had no objection to make to these arrangements. He did all in his power to second the intentions of his partner, and in the beginning of August everything was arranged for a long absence, and the Curtiss family were ready to depart.

On the day fixed for the start, all the New York fashionable world came in boats, according to custom, to bid Madge and her father farewell. They brought her flowers, they inspected the wonderful apartments on the yacht, they exclaimed at the luxury of the smallest details, at the elegant blue and silver uniforms of the crew, at the beautiful steam-engine, the steel of which shone like the rising sun, and at the electric light. A splendid buffet



On board the *White Witch*.



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had been fitted up aft. The guests drank to the health of the travellers, wished them a thousand pleasures, overwhelmed them with advice and recommendations of every kind. But soon the bell rang out loudly that the moment of separation had arrived. They returned to their boats. Raymond remained till the last to bid good-bye to Ebenezer and Mrs. Curtiss; then he stepped up to Madge, who was waving her handkerchief, and standing at the rail in a white yachting jacket, which became her blonde beauty to perfection.

"Good-bye, Miss Curtiss," said the young man in a voice that was not without some slight emotion. "I hope you will find in Europe, and especially in my dear country, all the happiness you dream of."

"Good-bye, Mr. Frézols," said Madge, cordially holding out her hand, which he clasped in his. "I accept your good wishes, for I know they are sincere, and that in you we have a tried friend."

"Never doubt it," he said simply. "And if ever you have need of me over there, call me, and I will come!"

Madge looked at him, a little surprised, but agitated, in spite of herself at the gentle gravity of his words, and she murmured her thanks. They separated. Raymond jumped on the gangway, which was hauled up as soon as he left it; and a few minutes later the *White Witch* was off at full speed, and soon she was only a thin plume of smoke on the horizon.

CHAPTER XV.

A NEW FRIEND.

RAYMOND FRÉZOLS was deeply affected at this separation. But his custom was not to allow himself to be discouraged, and according to his virile nature, he sought in work a means of diversion from his grief. And at first he took up the inquiry suggested by Ebenezer as to whether it would be possible to effect any improvements in the motive organs of the tube.

These inquiries occupied many weeks, and soon led to quite a new chain of ideas.

To be certain that the speed of the current was invariable in the submarine tube, he had cork balls made and coloured red, which a superintendent at Far Rockaway threw into the reservoir morning and evening, noting the time of their departure, while the arrival of each ball was watched for at Val Tregonnec and reported to New York by telegram. In this way it was proved that the speed of the oil in the tube was absolutely constant, and to

almost the tenth of a second there was no change in the propelling force or in the other factors of the problem.

Once Raymond was in possession of this experimental fact, he had the curiosity to vary the form and weight of his tiny messengers, and observe the influence these modifications had on their speed. He discovered that the influence was almost nothing on condition that the substances were ballasted in such a way as not to turn on their axis and move horizontally with the liquid that held them in suspension.

Another point which it was very important to be clear about was the development of heat resulting from this rapid transport. It was discovered by careful experiment that the increase of temperature variable with the form and nature of the object was always very slight, the refrigerating action of the sea bath through which the transport was effected being sufficient to maintain the whole length of the syphon at a temperature of two or three degrees above the normal.

In consequence of this, the young inventor was insensibly brought to consider if this new circulating organ established between the old and new worlds could not become an order of transatlantic communication, and serve as a vehicle for letters, newspapers, commercial samples, and light parcels.

Metallic cases hermetically sealed, enclosing various weights, and copied from those which have been in use for

years in pneumatic tubes in large towns for the carriage of letters, were substituted for the messengers of cork.

These cases exactly answered the purpose, and arrived at Val Tregonnec at the precise time they were expected. It remained to discover what was the limit of weight and size, and Raymond constructed cases of different forms and sizes, cylindrical, spherical, and conical.

He found that the cylindrical form, or to speak more correctly, that of a cigar already adopted as the most favourable for the transport of aerostats in the atmosphere, was the best for the cases destined to traverse the submarine tube with the liquid that bore them along.

These experiments were prepared and carried out at Far Rockaway. Since he had taken up his quarters at the office there, Raymond had gradually formed a laboratory of research where he had all the necessary appliances ready to his hand. Chemical products, reverberatory furnaces, magnetometers, machines for the rarefaction and compression of the air, a small forge, skilled workmen in iron and wood—he had gathered together all that could aid him in sketching out and definitely realizing, as far as large models went, any ideas that occurred to him. It often occurred to him, as to all inventors, to think of some new application of a substance already employed in industry ; or, on the other hand, to choose a better substance among

many others in a given instance. And instantly he could proceed to experiment in the matter on the spot.

A register open on his desk, and which was like the great book of these manifold investigations, was written up each day with the record of observations made or work accomplished.

The young engineer was thus occupied one morning in September in transcribing the notes relative to these attempts, when a telegram from Brest announced itself by the characteristic movements of the indicatory needle.

"Mr., Mrs. and Miss Curtiss," it said, "arrived yesterday at Val Tregonnec, and send their best remembrances to Mr. Raymond Frézols. Enchanted with their voyage and with what they have seen round the artificial lake. They are to dine to-night with the engineers, and will not fail to drink to the health of the absent one, whose inventive spirit everybody here loves and admires."

This cordial message gave the young Frenchman the greatest pleasure he had tasted for a long time. He desired to send a reply that should be worthy of the occasion, and he sent Cassoulet to buy in New York the loveliest flowers and finest fruits he could possibly find. Of these flowers and fruits he made several parcels, which he tied up with great care and enclosed in one of his largest metal cases. Then he gave orders for the cases to be dropped into the oil stream.

Cassoulet was present at the time, and opened his large eyes in some disappointment.

"Did you think these bananas and cranberries were for you?" said Raymond, smiling. "Would you also like roses and the magnolias?"

"Bother the flowers!" said Cassoulet, frankly. "But I confess I would rather have had a few words with that pineapple than throw it into the petroleum."

"Never fear; the petroleum will not touch it in the hermetically sealed box in which I have placed it with the rest. It will be quite content to appear before Miss Curtiss at dinner this evening."

"This evening?"

"This very evening! In seven hours' time you can look out for the telegram announcing its arrival."

The telegram was up to time. Punctually at the hour named the cable said,—

"Many thanks from Mr., Mrs. and Miss Curtiss to Mr. Frézols for his thoughtful present, which arrived in perfect condition, and will figure on the dinner-table in five minutes."

The success was complete. The tube through the Atlantic would for the future allow the fruit bought in the morning at New York to appear at dinner-time on the coast of France.

According to his custom, Raymond saw in this success

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Spurts of colossal flames whirled aloft.

but another motive for redoubling his efforts. After assuring himself that a weight of one hundred and fifty kilogrammes did not weigh more than a cork in the powerful motor at his service, he established a series of despatch-boxes, capable of containing quite a daily transatlantic mail, and invited the postmaster-general to come and see it for himself.

Again the attempt was a success, which the whole American press celebrated with enthusiasm. But to bring this application of the transatlantic tube into every-day use, it was necessary to open negotiations with the French Government, and arrive at an international agreement. This was not the business of the young engineer; the initiative in the matter he transferred to the competent authorities, and to the pressure of public opinion, and directed his personal activity to another object.

This time it was not a mere postal parcel he was thinking of trusting to the irresistible action of the Niagara and the submarine torrent of petroleum, but a living being, a bird, or, better still, a mammal.

If the dimensions of the tube had allowed, he would willingly have chosen for his experiment a horse or a bullock. Unfortunately the transatlantic syphon was only eighty centimeters across, and he had to be content with an animal proportionate to these dimensions. Raymond fixed his choice on a fine Great Dane mastiff,

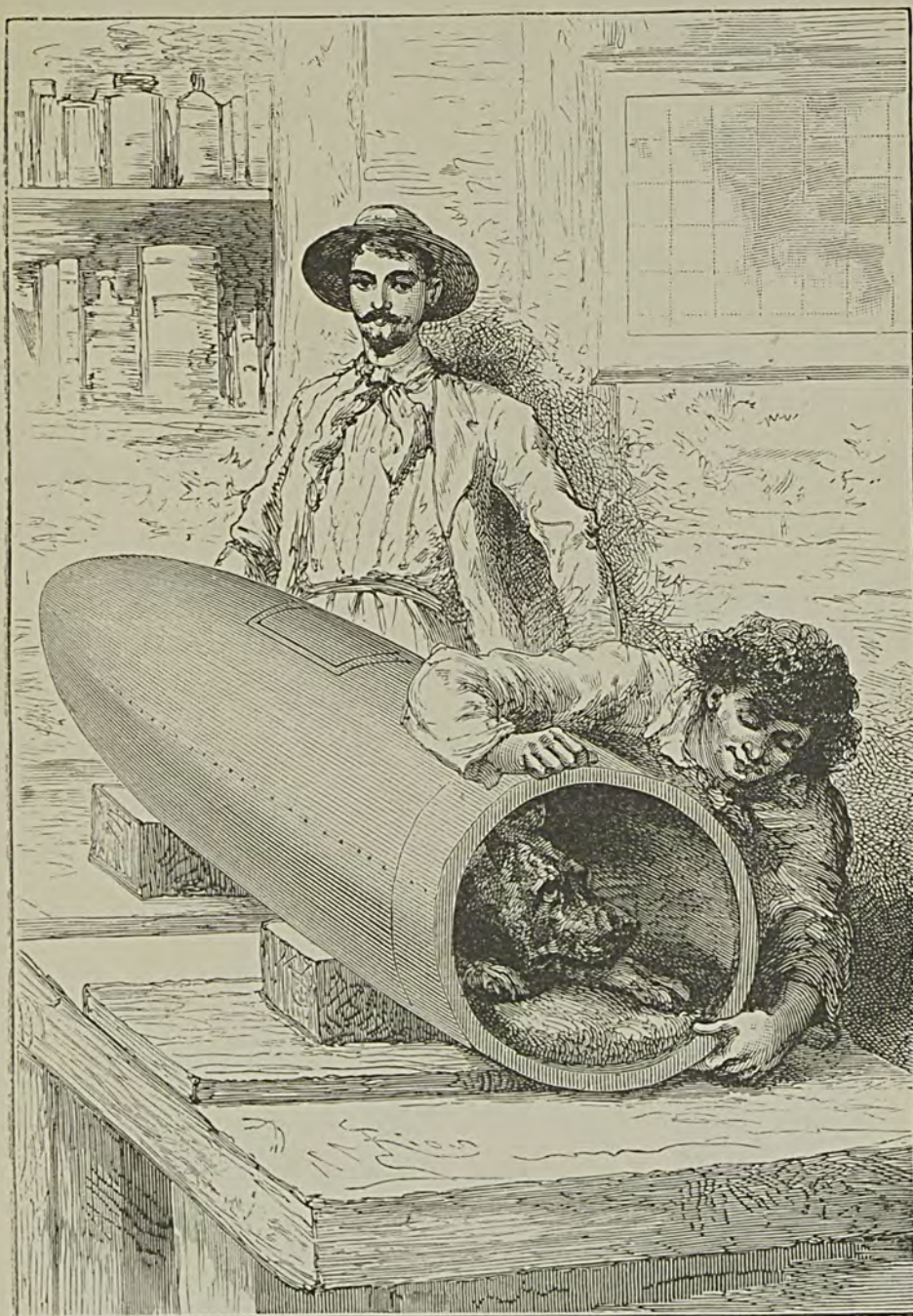
Romper, whom he bought from a dog-fancier. He was a superb animal of leonine form, greyish coat, and beautiful intelligent eyes, and very gentle.

He gave him a house in the yard of the laboratory. Cassoulet looked after his daily toilet with minute care, and the little colony was augmented by a new inhabitant, who was not the least decorative of the colonists.

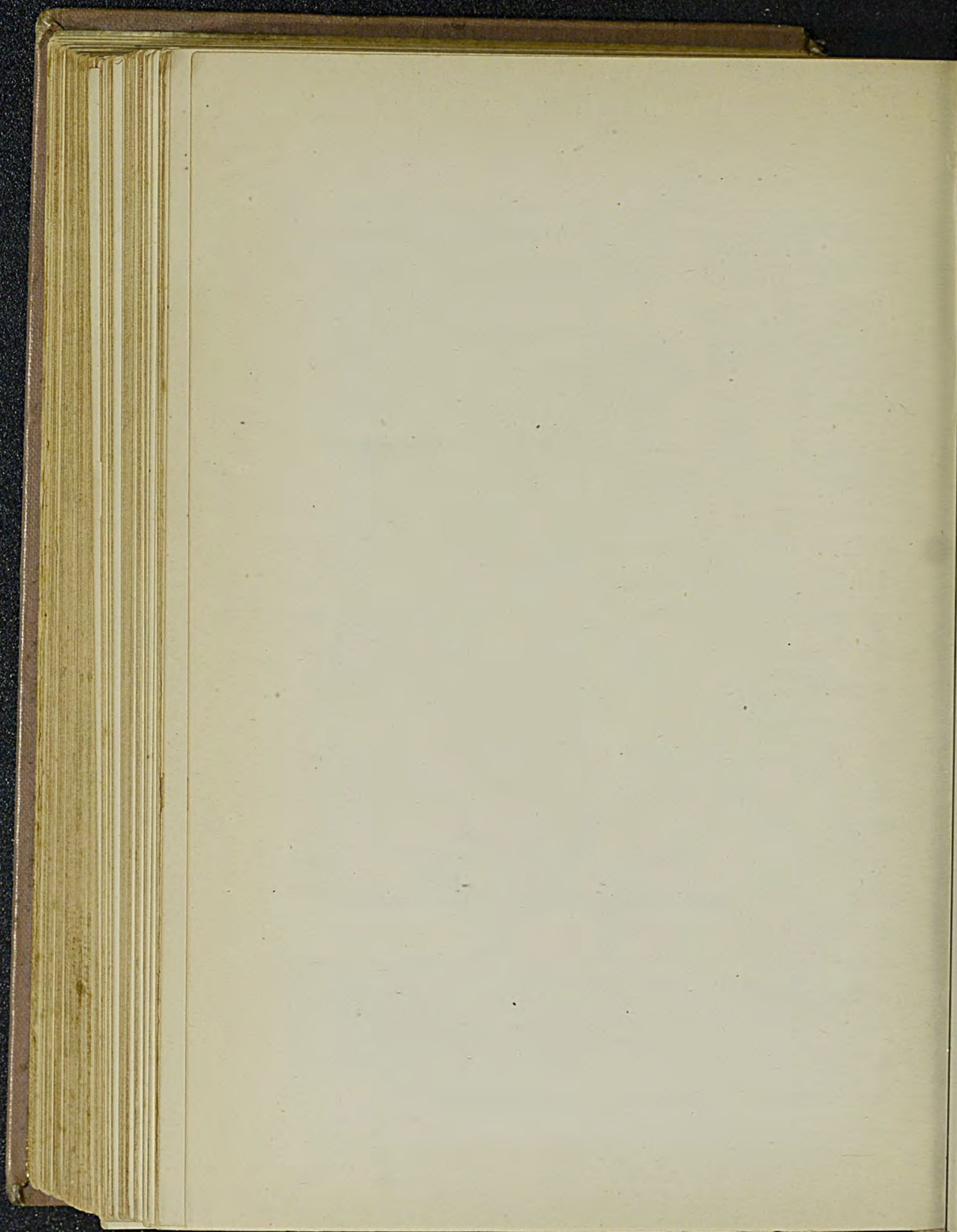
Each morning Romper was exercised in stretching himself at length in an iron case two meters long and seventy-six centimeters in diameter, terminated in front by a conical point, and at the other end by a flat section, being very much like a shell, and capable of hermetical sealing by means of a steel screw, and having four glass windows permitting an inspection of its interior. The interior could be lighted by a small portable electric light of the kind recently introduced into mines, and lasting for twenty hours.

The splendid Great Dane dog went through his drill with a docility and intelligence that would have put many a young conscript to shame. At Cassoulet's first word he would come running and wagging his tail, and jump into the shell and stretch himself on the leather mattress, and wait there motionless until he was shut up close in his cylindrical coffin.

This coffin was to be his vehicle in the submarine tunnel through the Atlantic. But besides the vehicle, it was neces-



Each morning Romper was exercised.



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sary to furnish the animal, who would be in it for seven hours, with a sufficient quantity of nourishment and breathable air.

For nourishment nothing was easier; a little porridge could be given him in a trough, and he could be taught to quench his thirst by licking a sponge. But breathable air was another matter, and quite a special arrangement became indispensable.

After several trials, Raymond ended by adopting the idea of a string of reservoirs attached to the rear of the shell, and containing compressed air. These reservoirs were put into communication with the interior by an india-rubber tube; a stopper cut off the communication, but opened every quarter of an hour by clock-work to allow a certain quantity of pure air to enter. At the same time a valve of similar dimensions, placed in the rear of the shell, allowed an equal quantity of vitiated air to escape.

Simple as this apparatus appeared, it cost Raymond many trials. The great difficulty was the working of the mechanism in a petroleum bath, and particularly in a stream of oil moving at high speed, without a small portion of the ambient liquid being introduced into the shell when the valve for the vitiated air was opened. This difficulty was at length overcome by having an arrangement specially for the purpose, consisting of an independent

box of air communicating at one end with the shell, and at the other with the air reservoirs.

Four complete apparatuses composed of cases with the reservoirs and automatic boxes were built on the plans of the young engineer. It would not do to be otherwise than quite certain of success in the event of some defect being discovered in one of the apparatuses; and it was well to have two to use, if necessary, for the preliminary experiments.

But then another obstacle suggested itself. How could he launch into the submarine tube this complicated apparatus, five meters long with its accessories and of a diameter almost equal to that of the tube? This delicate operation required a new contrivance, a huge steel sheath placed immediately below the syphon in the reservoir at Far Rockaway. A telegraphic signal to Niagara would for a moment suspend the action, the stopper closing the syphon. At once, worked from the steam-engine, the apparatus would be driven out of the sheath and lodged in the tube in front of the stopper. Then the pumps could be started again, the stopper withdrawn, and the current resumed to sweep away, like a feather, the shell and its satellites.

All these works took many weeks and cost much money, although the Far Rockaway laboratory and Raymond's ingenuity kept the cost as moderate as possible. When

all was ready, all that remained was to complete the experiment by shutting up Romper in one of the shells and sending him off on the first voyage through the tunnel.

But here a difficulty presented itself. During the three months the Danish mastiff had been at Far Rockaway, he had become much attached to Cassoulet. Their mutual affection was most touching, and it was difficult to say which was the more devoted comrade, the dog or the boy. The idea of seeing his friend shut up in a metal coffin with compressed air and electric light, and sent away under the ocean to the unknown, became positively horrible to Cassoulet. He said nothing, but kept in his heart the secret of his anguish. But the day that Raymond, without thinking any harm, spoke of fixing the date for Romper's departure, Cassoulet burst into tears.

"Oh! Mr. Raymond," he said, "I pray you not to condemn our poor good dog to such a sacrifice. You, who are so humane, how can you think of such a thing? The poor beast shut up in a box in which he can hardly turn round, and going like a package to people who do not know him. And who knows if he will ever get there. Suppose the apparatus breaks down. He will be stifled in it? If the force of the current is not sufficient to take him through. Oh! sir, it is frightful to think of!" etc., etc.

Cassoulet's grief was so violent and sincere that Raymond, with his usual kindness, was touched by it.

"Come, don't be miserable like that," he said, stroking the boy's head. "I am not a tiger, and if you think so much of Romper, we will keep him. I am not sorry, I assure you. I like the dog very much. But our experiment will be delayed ; we shall have to get another animal and train it to be quiet in the chamber. Don't play me such a trick as to get fond of that one, if you please ; or rather, I will see you have no knowledge of it !"

Things being thus arranged, Cassoulet resumed his usual serenity now there was no question of Romper being sent through the submarine tube.

CHAPTER XVI.

A LETTER FROM PARIS: MADGE TO ALICE.

"DEAR ALICE,—Do not growl at me any more; I have just taken a heroic resolution. I have countermanded all my engagements this afternoon to bring my correspondence up to date. And do you know what I have given up to accomplish this duty? A charity bazaar in which I was to have charge of a stall in one of the most lovely costumes that the Rue de la Paix could produce—a gown of dusty grey with short skirts, and a wide black belt and a large hat of Directoire shape all covered with feathers. If you were to see me with it on, you would say that it took an immense amount of fortitude to give up such an opportunity of success.

"What consoles me a little, is the thought of the disappointment of every one I know, and also the delightful reproaches on the subject of my absence, which I am sure to receive to-morrow.

"My dear, there is but one Paris in the world! That

is the conviction which grows more deeply rooted in my mind every day of my life. This town is so splendid and jolly, and they understand the art of amusement so well! It seems to me, when I think of it, that I had never had the least idea of it before. For such a long time I used to think New York and Fifth Avenue the miracle of the universe. How sorry I am that you are not here with me, dear Alice! The charming voyages of discovery we would go together! I want to tell you all I have seen, all I have noticed, all that interests me, and I do not know at what end to begin.

"First I must tell you that Yankees are made much of here. As soon as we arrived, we were introduced by the Honourable Mrs. Taylor, who is the head of the colony, and at once we were overwhelmed by invitations and attentions. What struck me at the outset was the elegant manners of the men. What a difference there is between them and our dancers, my dear! You have no idea of it. I wish I had a magician's wand to bring you over here to-morrow evening and introduce you to one of my most attentive friends, Le Comte Achille de Kélern. All the patriotism in the world would not prevent you from saying that we have not gentlemen of his brand amongst us. Of our gentlemen, with their so-called frank and cordial manners, which are really very boorish and uncouth, I have my remembrances, I assure you. If you talk for five

minutes with Le Comte de Kélern, if you see him offer an ice to a lady, hand her to her carriage, pick up her fan, or—what shall I say?—cross a drawing-room, enter, leave, salute, you would say with me that our poor friends, Ned, Charlie, Bob and Co., are simple counter-jumpers. With him you can see that he is well-bred from the roots of his fair hair, just a little thin on the temples, to the tip of his foot, which is as elegant as it is well booted. For he is of very noble and very ancient descent. The Kélerns have occupied their castle of Kélern, in Brittany, ever since the world began, or rather since it had any history. And, you can say what you like, that is something which money cannot give you. We have not in America any old families with a historic past and glory and traditions. For you would hardly say that, I imagine, of the Knickerbockers, the bourgeois of a century ago, and still Dutchmen! Miss Philippa Vavassour, an Englishwoman I often see, and who would please me better if she had not the mania of always saying the most disagreeable truths (which is not at all the custom in Paris), pretends that we Yankees are incapable of judging such things, and that to really recognize the well-born, we must have seen them from our cradles. The day before yesterday she pretended that even Le Comte de Kélern's manners appeared to her affected and slightly suspicious! I was in a rage. For very little I would have broken with her then and there. But I

thought better of it. Miss Vavassour is of good family, though without a cent; she has very grand connections, and I hope to be introduced by her in several high quarters. What she said of Le Comte de Kélern was pure jealousy, because he pointedly takes no notice of her. She shows it in a thousand petty details. 'Why,' she often says to me, with that brutal frankness which is so disagreeable, 'Why do you always say Le Comte de Kélern? You should leave that habit to the servants, my dear.' As papa said, if titles are not made for use, what good are they? If Miss Vavassour does not like to hear the title of Le Comte de Kélern, I rather suspect that it is because she has not the least chance of being the Comtesse of that name. And I am very much tempted to reply to her impertinence in permitting herself to think about me in that respect. 'Thank Heaven,' she says, 'my want of money will always keep me safe from any swindler!' As you see, we exchange very pointed amenities.

"But you say, 'It seems to me you are talking too much about Le Comte de Kélern. There is something in this. There is something brewing!' Well, yes, there is; and I will make you my first confidante, dear Alice. I believe that before long your friend will be La Comtesse de Kélern. There is nothing at present formal or final; I ought not, perhaps, to speak so soon, but I cannot help letting you into the great secret. My dear, I have already

made all my plans. When I am married, either in Paris or Brittany, for I have not yet made up my mind about that, my toilette is to be a wonder. I think that for the train of my white gown I shall have an embroidery of pearls and diamonds, which will not be at all bad. Philippa Vavassour, when I sounded her on the subject, said in her most decisive way that Parisian women did not wear their jewellery in the morning, and that we would do well to imitate them in that respect. But I have no intention of accepting her verdict as final. She is quite capable of trying to keep me from shining. I will have twelve bridesmaids, not one less, all dressed the same, in watteau-rose, and all nice-looking—do you understand? I can truly say I have no fear of comparison. Perhaps I should not think so if you were one of my bridesmaids, dear Alice. You would be the best of the lot, I know well. But why are you at New York?

“Do you know what I occasionally ask myself? What would Raymond Frézols think of all this? But, in the first place, does he still think about me? The smallest cog-wheel interests him much more than I do, I imagine. So much the better, after all. But all the same, I should like to know how he will feel when he learns that I am married. Would you be gentle? Then tell him the news yourself—not yet, wait until it is official, you know—and then tell me how he took it. And do not forget a single

word, or a shade of his expression. You have always been a friend of his ; from you he will hide nothing. Poor Raymond ! What a drawback it is to a young man to be without birth and without family ! Tell him, if you can, that, although I am going to be married, I shall always bear him in remembrance, that I had always a sincere sympathy for him, and that I wish to remain friends with him. I hear you exclaiming and protesting against what you call my coquetry. As if everything was so simple in this world's affairs. As if it was forbidden me, under pretext that Raymond is not the man I am to marry, to see that he is amiable, generous, intellectual—and young ! It is quite enough, it seems to me, to have the sense to prefer the solid to the agreeable. For, to tell you without circumlocution, Le Comte de Kélern has ten good years (if not fifteen) more than is absolutely necessary. And, notwithstanding his exquisite politeness and his old title, there are moments, I confess, when I cannot help comparing him with Raymond, so clever, such a good fellow (which between us we never disputed), so distinguished, and so chivalrous, without making any parade about it ; and then the comparison is not to the advantage of Le Comte de Kélern. But these are mere passing whims. I am not, you know, either melancholy or romantic. Raymond is out of it for ever. Le Comte de Kélern will be accepted, and on terms as indisputable as could be required. There

is nothing so real as his fortune, so authentic as his title, and his castle in no way resembles one in Spain. But I forgot to tell you how we made his acquaintance.

"About a month after our arrival in Paris, my father wished to visit the works at Val Tregonnec, where you know is the French extremity of the famous tube through the Atlantic. My dear, how this petroleum stinks, and how I hate speaking about it! But I cannot help it this time. The voyage by sea was from Havre to Brest in our yacht. Our arrival at Val Tregennec, you must understand, made quite a sensation! The engineers gave us a grand dinner—a dinner at which, by-the-bye, there figured certain flowers and fruit sent that very morning from New York to me by poor Raymond. All the local magnates were there: *prefet-maritime*, *maires*, *councillors-general*, &c., &c., among whom was Le Comte Achille de Kélern, whose historic castle rises hardly half a league from the Val Tregonnec. The Comte was introduced to us; he showed himself most attentive, and, assuring us that we would be served abominably at the hotel if we remained there, asked us to accept his hospitality. We did not at once accept, and contented ourselves with inviting Le Comte de Kélern and most of the guests to a lunch next day on board the *White Witch*. But after this lunch there was no reason why we should not visit a castle of which we heard

such marvels, and as I was curious to see it, we decided to go.

"I may tell you at once, dear Alice, that it is an incomparable architectural gem. Figure to yourself an old feudal castle with its towers, portcullises, machicolations, dating perhaps from the twelfth century, and yet so well restored, so nicely looked after, that you might consider it as built yesterday. It was Le Comte de Kélern himself who worked the miracle, thanks to the assistance of an illustrious architect now dead, whose name, Viollet-le-Duc, you know. It seems that the restoration of the past was but an amusement to him. He took the Castle of Kélern in its ruined state, and in a few years he had it completely rebuilt on its original plans. This restoration must have cost a good deal, but Le Comte is very rich, although his family was ruined by the Revolution. It seems he made a large fortune in the Australian gold-fields, and his first care on returning to the cradle of his family was to rebuild the hereditary home. At present it is one of the curiosities of the country which all travellers are eager to visit. Figure to yourself, my dear, walls of such thickness that you can excavate complete rooms in them; vaulted everywhere; stone staircases; monumental fireplaces. On all sides the family arms are carved in the wood, cut in the marble, or worked in the iron. Le Comte bears 'azure with three besants, or.' That tells you his an-

cestors went to the crusades. I do not know much about them, but I must find out for my own edification and that of my father, whom these details literally overpower with delight. A son-in-law who figures in the *Almanach de Gotha*, and who has besides the ability to make a fortune for himself, is, in his eyes, the compendium of all human perfections. And he is very proud to see me sought after by *Le Comte de Kélern*, and everybody says it is not an easy conquest, let me tell you.

"In short, my dear Alice, there only remain those extraordinary complicated formalities which surround marriage in this country; the official asking; the reading and signature of the settlements before the votaries; the publication of the banns; the approbation of the families; and the double ceremony. By the terms of the law I must become a Frenchwoman by marrying a Frenchman, and it is according to the French rites that everything must be conducted. You see there is plenty of time to reflect! But I did not like to keep back the news from you until it was published in the papers. So keep it for yourself. I send you the photograph of *Le Comte*. You can assure yourself that I have in no way exaggerated his good looks and his distinguished air. But do not show it to any one till I have told you to.

"Adieu, my dear friend, when you see Raymond, remember me to him, and give him my personal thanks for his

kind message. I was speaking of him yesterday by chance in the presence of Le Comte, and I fancied I noticed on his face an expression of displeasure, or uneasiness, or weariness, really I do not know what.

“‘Do you know Mr. Frézols?’ I asked him.

“‘No. Why?’

“‘It seemed to me that when you heard the name, you were struck by it unpleasantly.’

“‘Indeed. Perhaps there are certain names like certain faces to which you have an antipathy. But I scarcely heard the one you mention.’

“Try, my dear Alice, if the name of Le Comte Achille de Kélern produces a similar impression on Raymond, and do not fail to let me know. Good-bye. With all my heart I embrace you.

“MADGE CURTISS.”

CHAPTER XVII.

THE FIRE.

ALICE COOPER faithfully kept the secret entrusted to her by her friend, and spoke of it to no one. Perhaps she had doubts as to the seriousness of an engagement which she had seen so often broken. But, without doubt, the projected marriage between Madge and Le Comte de Kélern was already no mystery with the American colony in Paris, for the news soon reached New York. It spread very quickly, and at once appeared in the fashionable journals. According to custom, the papers murdered the name of the bridegroom, some called it Kélorn, some Kerel, some Kérl, and some something else.

The name mattered little to Raymond Frézols. He only saw the news, and was much disturbed by it.

But at once he said to himself, that Miss Cooper could tell him all about it, and he went and called on her.

She at once told him what she knew.

"Five weeks ago Madge told me all this," she said, "but

quite between ourselves. As I heard no more about it, I thought that the scheme had evaporated like so many others, and I refrained from spreading the news."

"You believe it now?"

"I know no more than I have told you, having had no further letter from Madge since the one in which she told me of this Comte de Kélern. Would you like to see his portrait?" continued Miss Cooper, rising to take an album out of her desk.

Raymond said neither yes nor no, but could not help giving a glance of savage curiosity at the face of him who was about to destroy his dearest dream. It was that of a man of thirty-five or forty, slightly bald, well dressed, and holding his hat in one hand and his cane in the other.

A curious thing happened which Raymond could not at first explain; the features of the portrait were not unknown to him. They evoked in him a vague remembrance of some one he had seen before, or some one who had crossed his path. But so many photographs leave that impression—a meeting on board ship perhaps, or a neighbour at a dinner-table in some hotel. Raymond was too sorrowfully occupied just then to think much of the feeling of surprise that he experienced.

But, as he was returning to Far Rockaway, suddenly this name of Kélern, which Miss Cooper had correctly pronounced, occurred to him, and the portrait in which he

thought he recognized somebody took the shape, as well as the name, of the mate of the *Belle Irma*, that faithless friend who had taken him to the Falls of Montmorency and abandoned him there.

And this idea that Madge's future husband might be—ought to be—was undoubtedly—the same Kélern, grew and rooted itself in the engineer's mind.

How could Achille Kélern, formerly a mere sailor, find himself, after fourteen years, owner of a castle near Brest, gifted with the title of count, living as a great nobleman, and be on the point of marrying the daughter of the petroleum king? That is what Raymond could explain with difficulty, or rather could not explain at all. But the conviction that these two men were but one, that the Kélern of the *Belle Irma* had become the Kélern of Val Tregonnec, grew so strong that Raymond did not doubt it in the least.

And he was consequently more surprised than broken-hearted when he entered his office at Far Rockaway, and found on the table a telegram awaiting him. It had arrived about twenty minutes before, according to Cassoulet.

Raymond tore open the envelope, and grew pale as he read the message which came from Drill Pit, and bore the signature of Peter Murphy.

"The dépôt is in flames; two hundred vats are on fire," said the blue paper laconically.

"What o'clock is it? Have we time to catch the express?" asked Raymond.

"You will have to hurry," said Cassoulet. "There are seventeen minutes for you to get to the station in."

"Quick, then. The dépôt is on fire!"

Without further explanation Raymond ran off at racing pace, accompanied by Cassoulet, who had no idea of being left behind.

The train was on the move when they reached, panting and out of breath, the station of the Erie Railway. But Raymond was not used to be beaten even by time. With a bound he was on the platform, with another he was on the step of the last car, followed close on his heels by Cassoulet. And the train ran out amid the cries and protestations of the railwaymen, who were furious at this contempt of all rules and regulations.

"We will pay on the journey," said Raymond.

And as after all it would not be easy to dislodge them, the conductor decided to accept these supernumerary passengers.

The cars of the train communicate with each other by intermediate platforms opened on to by the central corridor. It was thus easy for the intruders to get inside, and the journey was accomplished without any notable incident. At three o'clock in the morning the train was in sight of Drill Pit. Standing on the engine, Raymond,

who found he knew the engineer slightly, appeared desirous of hastening the speed, and sought to pierce the morning twilight to distinguish from afar the light of the fire. He had not long to wait. Rounding a hill which marked the valley of Yellow River, the sky appeared all in flames as if at sunset, and immediately the train reached the clearing amid the surrounding woods of the petroliferous territory, the spectacle lay before them in all its wild grandeur. spurts of colossal flames whirled aloft beneath a mass of heavy black vapours which formed, for a length of two kilometers at the least, a glowing curtain across the starry sky. The wind excited the flames, twisted them into gigantic curls, and writhed them like infuriated serpents. As far as could be seen everything was on fire, tanks, derricks, even the wells the fire had seized, and which now broken down by the expansion of gas, torn open and split asunder on all sides, were spurting forth fire like volcanoes. The spectacle was as splendid as it was disastrous, and a look was enough to show it was beyond remedy.

As soon as Raymond set foot to the ground he ran off for particulars. He learnt that the fire broke out about four o'clock in the afternoon, at many places at once, and that it evidently was the work of some criminal hand. Quick as had been the arrival of the firemen, the flames had spread furiously; they had reached Williams Well,

and at six o'clock all attempts to keep them within bounds had had to be given up. Now all that could be done was to wait till they had expended themselves.

The loss was immense. The greatest sufferer was Ebenezer Curtiss; the central depôt, where the fire had done most damage, and the Williams Well being his private property.

Even sadder news awaited Raymond and Cassoulet at Johnson Well. Peter Murphy was dying in the travelling telegraph office. Immediately after sending off the news of the fire to New York, the unfortunate man had gone to give a hand at the central depôt. He had displayed the most brilliant courage in being the first to mount a tank near the fire and take up a hose with him. But the position was not tenable, a few seconds afterwards he had fallen to the foot of the reservoir, shrieking dreadfully. He was frightfully burnt, and his body was one big wound. He had been taken to the telegraph office, where the clerk had done all he could for him, although there was no hope of saving him. The doctors, who were called in all haste, said at a glance that he would die.

When Raymond and Cassoulet arrived at the old coach, they at first saw only a shapeless, groaning mass. Poor Murphy was harrowing to look at. His whole body was burnt, his face blistered, and almost unrecognizable, one of

his hands was half calcined, he did not seem to have a moment to live.

And in fact he only lived by a miracle of energy, waiting for the arrival of Raymond, whom he called for from time to time amid his groans.

"He will come, I am sure, as soon as he receives my telegram," said he for the hundredth time perhaps, at the very moment Raymond entered his old home.

"Yes, my dear Peter, here I am, and here also is Cassoulet," he said, bending over the miserable mummy. "Are you in much pain?"

"Yes! Mr. Raymond," said Peter with great effort. "Yes! I am suffering terribly. But that is nothing. I am glad to see you again! I have been waiting for you! Oh, for mercy sake give me something to drink!"

Raymond gave him a glass of fresh water which he drank greedily, and which seemed to give him strength to speak.

"Mr. Raymond, it was Timothy Campbell who started this fire!" said he immediately, with a clearness of thought and language quite unusual to him. "I am sure of it! I have been watching him for a long time. I saw him the other evening inside the fence of the central dépôt. Unfortunately I could not find out what he was doing there. I took extra measures to surprise him, and I thought I would catch him to-night, hiding among the

reservoirs. But he anticipated me by setting the fire going during the day. They saw him in the dépôt an hour before the fire broke out at ten or twelve points at a time. He was there, he said, to take a message to the porter—in reality to light the pitch or rosin which he had placed under the valves of the tanks.”

Peter Murphy said all this, interrupting himself at almost every word to take breath, but with a lucidity quite surprising. It seemed as though the mist with which his intelligence had been obscured for so long was being torn asunder and dissipated as death approached. Nevertheless, the long speech seemed to have exhausted the strength that remained to him. He stopped, and remained for some time silent, with his eyes closed, and as though sunk in a dream.

He awoke again, to fix his eyes on the young Frenchman, who all the time leant over the bed.

“Mr. Raymond,” said he, “will you give me a clasp of your hand?”

“Willingly, my poor Peter! You know how much Cassoulet and I feel for you, and how pained we are to see you in this state.”

He held out his hand to the wounded man, who clasped it in his left hand, the only one that remained unhurt; and large tears rolled down his charred cheeks.

“Mr. Raymond,” he said, struggling for breath, “I want

to hear you say—for once—that you pardon me—that you wish me no harm—it was not my fault—really it was not ! Poor little chap ! Poor little chap !

“He is wandering,” said Raymond.

“No, I am not wandering !” exclaimed the dying man, with surprising energy. “I am in my sound senses, Mr. Raymond, better than I ever have been since that cursed day. You forgive me ? Say, you forgive me ?”

“I forgive you,” said Raymond solemnly, impressed in spite of himself by the supplicating tone of the question. “I forgive you—if you think I have really anything to forgive.”

“Oh ! thank you ! That does me good ! That eases me of a weight. When I think of the poor little boy when he went away, I see him with that fair head and those bright eyes giving his hand to that scoundrel ! Poor little chap ! If I became an idiot, it was because my heart hung so heavily when I thought of him ! Poor little chap !”

He held Raymond’s hand in his, but the clasp was growing feeble and intermittent. Suddenly his fingers stiffened. He repeated once more,—

“Pardon. Not my fault ! Poor little chap !”

Then he gave a long, deep breath ; his look clouded ; and his face set into corpse-like immobility.

Peter Murphy had ceased to live.

Raymond gently withdrew his hand, closed the eyes of the dead, and after remaining a few moments near him in the mournful meditation that the solemn sight always evokes, he told Cassoulet to watch that nothing was stolen from their humble friend.

Impervious duties called Raymond away. He had to arrange with Jack Freeman what measures to take, to give information to the authorities of the serious charge against Timothy Campbell, and to acquaint Ebenezer with the extent of the disaster.

As was only natural at so important a crisis, Jacob Freeman had passed the night at the central dépôt anxiously following the progress of the conflagration, and doing his best to get it under. Raymond found him in great trouble.

"I really do not know what to do!" was the greeting of the worthy cashier. "Shall I telegraph to Mr. Curtiss, or put off the disastrous news for a few hours. I cannot make up my mind which it is my duty to do!"

"Why put it off?" said Raymond. "I do not understand it—"

"Good! Do you not know that Mr. Curtiss, his wife and daughter, are now at Brest to celebrate the wedding with Le Comte Achille de Kélern? Did you not get the telegram yesterday which announced the fact? It was as much for you as for me."

"I had nothing!" said Raymond in an altered voice.

"Here is the paper!" said Jacob Freeman, taking it from his pocket.

"Paris.—Tuesday morning.—We are starting for Brest, where we shall celebrate the morning after to-morrow the marriage of my daughter with Le Comte Achille de Kélern. On this occasion I desire that all the employés of the firm at Far Rockaway, as well as at Drill Pit and Niagara, shall receive a month's wages or salary in token of rejoicing, and that on Thursday they dine together to drink the health of the newly-married couple in my best champagne. I request my old friend Jacob Freeman and my young friend Raymond Frézols to take the matter in hand.—Signed, EBENEZER CURTISS."

"The telegram must have reached New York after you left," explained Jacob Freeman. "I had it at six o'clock yesterday evening. You will see what it costs me to trouble the festivities with the news of this fearful fire. After all, we might wait twenty-four hours, for the ceremony is fixed for to-morrow."

To-morrow! They were now at Wednesday; and the telegram said Thursday morning!

Raymond was stunned by the unexpected news. Madge lost to him! But what could be done? He also was of opinion that they could not send such news to spoil the festal day at Brest. Serious as was the disaster, it could

only be of secondary importance to Ebenezer Curtiss ; a few millions the less that the tube through the Atlantic would soon make good again. There was no need to tell Ebenezer at once. According to all appearances he would prefer to have the news after the wedding. The important thing at the moment, the imperative duty, was to put justice on the culprit's track by reporting the declaration of Peter Murphy.

Raymond informed the old cashier of what had occurred, and the two went off at once to see an attorney to testify under oath as to the reasons they had for thinking Timothy Campbell guilty of setting fire to the dépôt. When that was done Raymond took a copy of the affidavit to the head of the Drill Pit police, to demand the arrest of the culprit, making himself publicly the accuser, according to the American practice.

The magistrate was no sooner in possession of the circumstances of the affair than he summoned a detective and gave him his instructions.

"Timothy Campbell left Drill Pit last evening," said the man. "I was at the railway-dépôt and I saw him enter the train going east."

"In that case we shall probably have some trouble in finding him again," said the magistrate. "But I will advise the metropolitan office and give the man's description."

All that Raymond could now do was to give his address

at New York and await results. After breakfasting mournfully with Jacob Freeman, he went back to the travelling telegraph office. There he learnt that a sanitary officer, who had come to certify Peter Murphy's decease, had ordered the immediate burial of the corpse. The obsequies were fixed for nine o'clock.

Raymond and Cassoulet followed the body with the staff of the Curtiss establishment, and a great number of the inhabitants of the town, who wished to give poor Peter the last mark of esteem.

At ten o'clock all was over, and Raymond, having nothing to do at Drill Pit, decided to return by the express to New York; when it was necessary he should lose no time in making good the deficiency of petroleum caused by the fire.

An hour later he was on the road, thinking sorrowfully of what was in preparation for the morrow on the other side of the Atlantic. Cassoulet, seeing him so mournful, tried to arouse him.

"Mr. Raymond," said he, "do you remember that poor Peter always wore an oiled silk packet that he would never part with, and that he would never tell its contents to any one?"

Raymond, by a nod, showed that he remembered this detail.

"Well," said Cassoulet, "on laying him out, we found

this packet on him, and I had the curiosity to open it. It contained a note-book, and there is your name on every page. Would you like to read it ? ”

As much astonished as his little comrade, Raymond took the note-book and opened it. It was a kind of autobiography, written in fairly good French. And this is what it said :—

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CHAPTER XVIII.

PETER MURPHY'S CONFESSION.

"I FEEL that my reason is going, and that I am becoming mad. That is the result of the habit of drunkenness which I contracted to deaden my sorrows and my remorse. I know it; I see the inevitable end to which my habits will bring me—paralysis, idiotcy, and death. But I cannot set myself free; they hold me and rule me; they will finish their work.

"Before they have completed it I will write my confession, and say what was my crime. I might do better to go to a magistrate and take my declaration with me. But I dare not. I am afraid. I am a coward. I fear the consequences of the avowal. I fear to be put in prison, and deprived of brandy. People will know the truth when I am no more, or when they cannot hold me responsible for my acts. That is why I write this. I shall take care that this confession is found only when I am dead, physically or morally, and I will keep it on me.

I wish the real culprit, if he still lives, to be caught and convicted and punished ; but I do not want to bear the penalty of his crime and my complicity.

"The doctor I consulted at Boston said to me, 'You have some trouble on your mind. Mind what you are about, and try to relieve your mind ; otherwise your reason will one day succumb under the burden.' He saw clearly enough, did that Doctor Sampson ! And I want to relieve myself from the remorse which wears me away. Let me try while I have my reason. Let me put on paper the remembrances which overwhelm me. Perhaps after having written my confession I shall experience some relief.

"And first the truth about my name. I am not Peter Murphy ; I am Pierre Gimet, and I am a Frenchman.

"But I have no longer the right to boast that I am one. The first consequence of the criminal folly in which I allowed myself to be involved was that I had to hide my identity and even my nationality. Profiting by the experience I gained during the long time I lived as a school-master in Ireland, and calling myself a native of Limerick, I took a very common name in the country ; I assumed a false personality, and as if it were a cannon-ball chained to my leg, I dragged the evil falsehood across the two Americas, trying every trade and succeeding at none.

"I was all the same intended for something good, and

my instincts, I believe, were never bad. It is out of pure weakness that I did the wrong out of which I never made any profit. My first schoolmaster, excellent man that he was, interested himself in me because I was rather a good pupil, had remarked the fatal vice of my nature, the absence of will, of initiative and courage. 'With Pierre Gimet,' he said, "the last who speaks is alway right. He must be under somebody's influence. Never has he an opinion of his own. May Heaven grant that he may wisely choose his friends and his guides!"

"I have just said that I was rather a good pupil. My intelligence would, in fact, be considered as equal to anything, and yet not sufficiently marked for anything in particular. In turn I obtained in my classes the prize for history, for geography, for arithmetic; but I confined myself to none of my studies, and never had a decided taste for anything. Some secondary reason had generally determined the current of my efforts for the year and this reason was often a pure mania of imitation, the desire to do the same as such and such of my school-fellows.

"Being gifted with this weakness of character, I needed more than other boys some intelligent and firm direction, some will to replace my own, some conscience to keep me on the right road. Unfortunately I lost my parents early in life, and no one took sufficient interest in me to urge

me to make the best use of my faculties. I failed at my Bachelor's examination. This was a terrible blow to my vanity. This very common defeat, which any one else would have wiped out at a second examination, completely dissipated my courage. All I thought of was leaving my native town, to get out of the way of the witnesses of my humiliation.

"An opportunity offered for me to obtain, without any university degree, a situation as French master in a small school in the environs of London. I greedily jumped at the offer, and expatriated myself. Then instead of profiting by the chance to thoroughly learn a foreign language, to pursue my studies, and attain to an honourable position in teaching, I abandoned myself to idleness. For several years I struggled on in subordinate positions. If I finished by learning English, it was because I acquired it as if it were a contagion, and without taking the least trouble over it.

"At the end of ten years of this kind of life, I found myself at Cork in Ireland, the tutor of a child of five years old, whom I taught to read, very badly paid and very discontented with my lot, but without energy enough to improve it—when I had the luck to render some slight service to the captain of a French ship, the *Belle Irma*, then in the harbour. This officer was named Frézols. He interested himself in me, had pity on my distress, and

after satisfying himself I could act as his clerk and secretary, offered me a place on board.

"I accepted the offer, and set off. The *Belle Irma* was a fine three-masted vessel, of six hundred and twenty tons, which had been a whaler for many years; but the fishery becoming less and less profitable, Captain Frézols had decided to use her as an ordinary trader, with any cargo he might pick up. The ship was his own property, the investment of a small fortune boldly acquired in the Arctic seas. Now his voyaging was under more clement conditions, and the captain had with him his young wife, and his little boy Raymond, then a child of four years of age.

"In this way I made many voyages to China and Japan, then to Valparaiso and Callao. Mr. and Madame Frézols showed me much kindness, and I should have been quite happy had it not been for a ridiculous weakness which often caused objectionable remarks to be made about it, and even brought on serious disagreements. This was the curiosity which caused me to occupy myself with the affairs of others, spying on them, listening at doors, and conducting myself in fact like the worst of servants. If I add that this insatiable curiosity was doubled by the boundless indiscretion which forced me to chatter about all I had seen or heard, it will easily be understood what the consequences were to me in the little world of a ship.

Frequent disputes, quarrels and unpleasantness raged on board ; and generally it was all my doing. But I always managed to escape punishment for my indiscretions caused by excess of candour. They used to say of me, ' He is the best fellow in the world ; he would not hurt a fly ; he has his heart in his hand, and does not know how to keep it. The truth is, my tongue and my ears were much too long, as will soon be seen, alas !

" On a voyage we made to Sydney from Bordeaux with wine on board, it happened that all the crew deserted to go to the gold-fields, then recently discovered in the Blue Mountains. This was an accident to which many other merchant ships were exposed, as the gold-fields exercised an almost invincible attraction on the imagination. Fortunately, the deception did not last long ; the sailors discovered that even at the gold-diggings pheasants did not fall ready roasted from the sky, and that it took a lot of trouble to find a nugget. So that generally it was not difficult to complete a new crew, the number of deserters returning to the coast being considerable.

" It seemed to me that Captain Frézols was in no hurry to engage fresh men. He contented himself by engaging at weekly wages a few men in the harbour to keep the ship in good condition, and load up a cargo of valuable woods he had bought on his own account. He had sandal-wood, iron bark, and tulip-wood, and all the rarer timber

of the Australian continent and neighbouring islands. This timber was all in baulks, that is to say, in pieces of the size of the trunks and roughly squared; some of them being so heavy that it took five or six men to lift them. At the time I took little notice of this detail. But later on it returned to my mind, and explained something in a most natural way.

"Captain Frézols had spent a month ashore with his family in a villa hired by him not far from the beautiful Botanic Gardens. When the cargo was complete he busied himself in engaging a new crew, or rather, he gave me orders to do so. I engaged a score of men without troubling myself much about their nationality or their experience, as one is often obliged to do in such cases; but I thought I had found a real treasure in a Breton sailor, some twenty-two or twenty-three years old, whose name was Achille Kélern. He was a good-looking fellow, tall and well set up, thoroughly efficient in his work, and most anxious to please and show himself active when his chief's eyes were on him, not over-scrupulous, and obliging when it paid him to be so; in fact, one of those fellows who always do well on board ship.

"Achille Kélern easily won over the captain. In less than three days he was promoted without intrigue and without effort from the position of ordinary seaman to that of mate. For my part, I felt unbounded admiration for

him ; we were inseparable ; we ate together, we slept side by side, and when he was on watch I kept him company. Like all such men, he was a beautiful talker. If he was to be believed, he belonged to an illustrious Breton family, ruined by unavoidable circumstances, ruined to such a point, that he, the last of the race, had to serve as a common seaman. But he would not always remain so ; he would, sooner or later, repair the injustice of his lot, and restore the glory of his house, etc., etc.

“Captain Frézols, touched by the misfortunes of which there was nothing to prove the truth, showed young Kélern increasing favour. He did not see that his young favourite had two faces—one polite, flattering, amiable, for those he could get something out of ; the other, harsh, insolent, even cruel, for his subordinates or for those from whom he had nothing to fear or to hope. We had been three weeks at sea, on the road to Cape Horn, when Madame Frézols fell seriously ill, and was obliged to take to her bed. Soon it became evident that her illness would end fatally, and the captain, absorbed by the incessant cares her case demanded, trusted the command more and more to Achille Kélern. For my part, I hardly went out of the saloon, and often I slept within call of my chief, in case he wanted any help.

“One night, when the heat was excessive, I had gone on deck for a little fresh air, and the captain thought the

saloon was empty. And he had left open the door of the cabin where the dying woman lay. I thought he was talking to her in a confidential tone, and at once, urged by my deplorable instinct, I hastened to descend like a cat and hide behind the door and listen.

"It was a solemn interview. Madame Frézols, feeling she was approaching her end, was beseeching her husband to forsake the sea and take up his home in France, to look after the education of little Raymond, who was about entering on his seventh year.

"‘You know you promised me,’ she said. ‘What you could not do for me, do for your child. Your fortune is larger than we ever dreamed of, and those twelve baulks of tulip-wood filled with gold added to the value of the cargo and the ship would bring you in a considerable income. Well, I beseech you do not make our son a sailor, it is too hard a life, especially for those we leave behind us. Put him into industry or science if you would not suffer all the anguish that has been my lot when you have been alone at sea.’

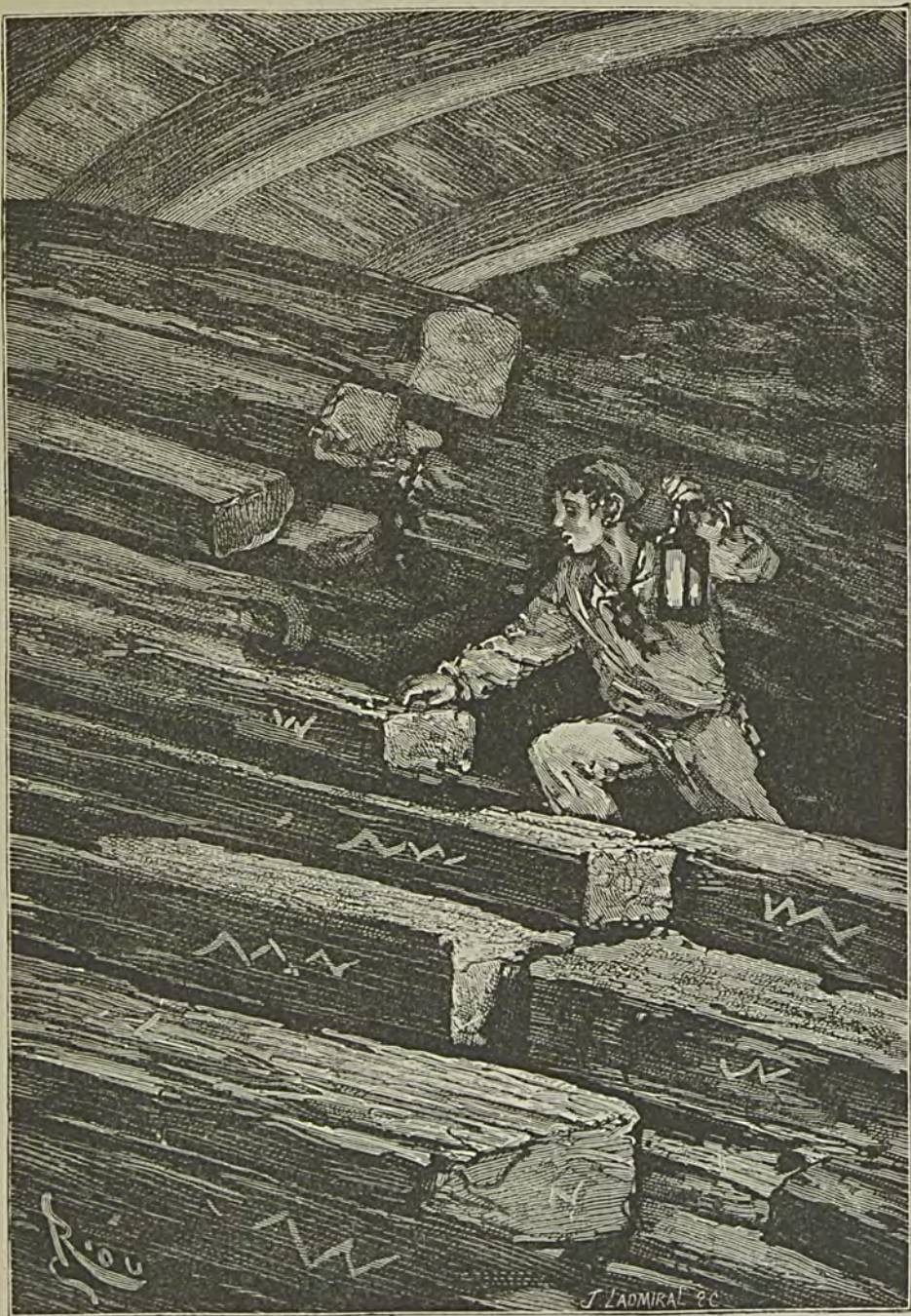
"The captain promised to obey his wife's wishes. There was a long silence, and, fearing to be surprised, I slipped away noiselessly.

"The news I had overheard of twelve baulks of tulip-wood filled with gold, made me think of the trouble the men had had one day in hoisting them aboard. I knew

pretty nearly where these baulks were stowed. Lighting a lantern, I hurried down into the hold and made a careful examination. In a quarter of an hour I had found out the baulks in question. There were light chalk marks on them, and, on looking carefully, it was not difficult to discover a hole closed by a wooden stopper, into which the gold had been run.

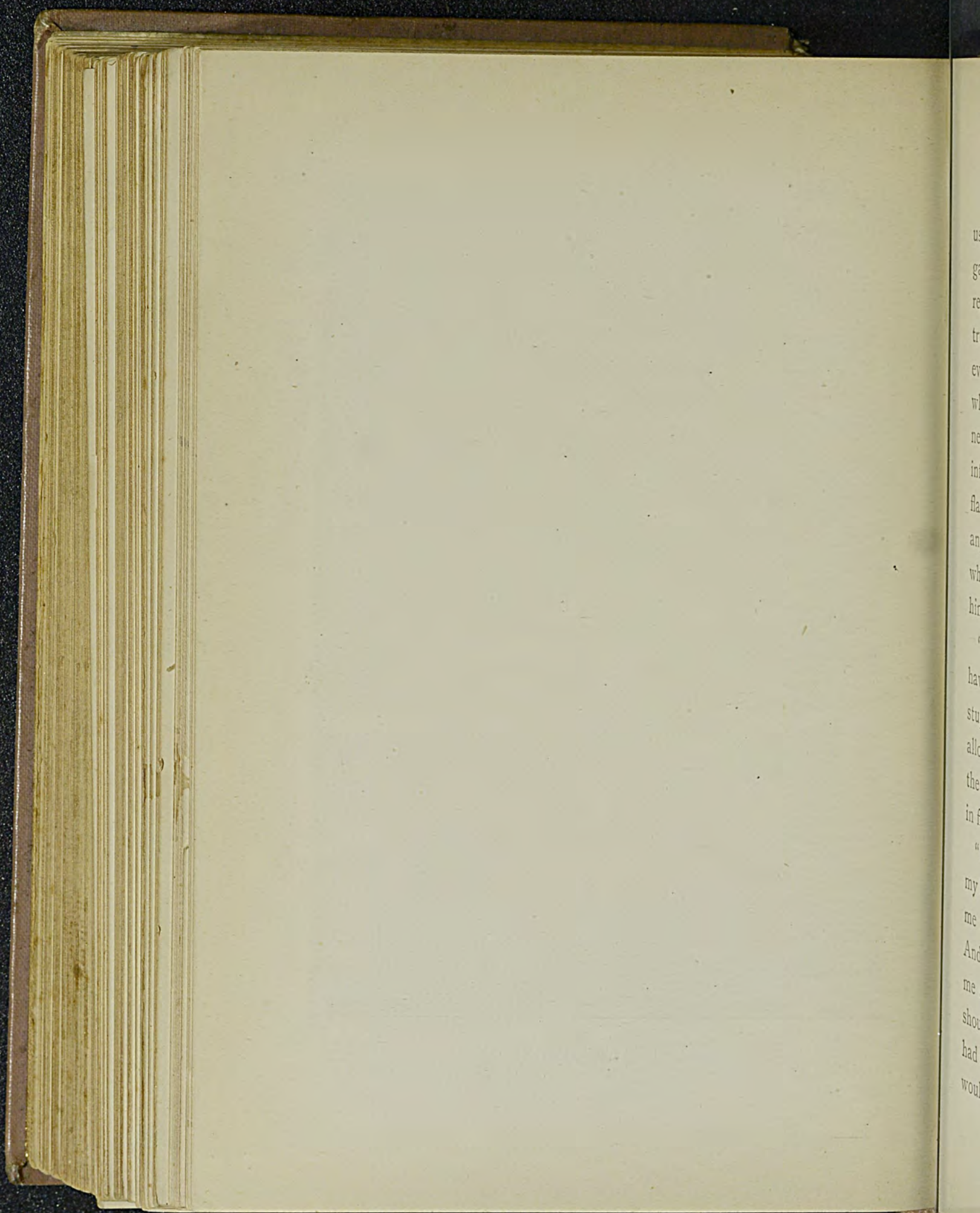
"Why had Captain Frézols had recourse to this strange means of hiding the treasure he was bringing away from Australia? I presumed it was in order not to tempt the greed of the scratch crew. During his stay ashore, near the Botanic Gardens, he had probably had an opportunity of purchasing a certain quantity of native gold, and the idea had occurred to him of concealing it from all eyes, even from mine, by running it into the baulks of choice wood, which had previously been hollowed out. *Even from mine.* That is what seemed insulting to me. I did not say to myself that, knowing my habitual indiscretion, the captain had acted wisely in taking such precautions. No. I only thought of taking offence, and frustrating his intentions.

"Madame Frézols died, and the poor captain, giving himself over entirely to his grief, left the charge of the ship more and more to Achille Kélern. He spent whole days in his cabin, a prey to profound grief, and found hardly any distraction, even in the smiles of his little boy. As for



There were light chalk-marks on them.

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us, we saw that we had changed masters, and had not gained by the change. Kélern was brutal, cynical, a regular tyrant. He did not even attempt to mask his true character, and I began to think he was capable of everything. But, ashamed as I ought to be to say it, I, whom a particular instinct warned against the unworthiness of the man, not only did I not try to check his influence, but I helped him, and I had the cowardice to flatter, and always think as he did. One evening, without any necessity, without any object than that of showing what I knew, and testifying to my devotion to him, I told him the secret of the baulks of tulip-wood.

"Having discovered such a secret, I certainly ought to have had my tongue torn out rather than reveal it. By stupidity, by weakness, by mere love of show, I had allowed myself to tell it to the very man who would use the knowledge for the worst of purposes. I was not long in finding out what a mistake I had made.

"Kélern began by making me tell him all the details of my knowledge ; he went with me into the hold and made me show him the baulks with the chalk marks on them. And when he was in possession of these facts, he informed me solemnly and significantly that he intended that we should be the only possessors of the secret, and that if I had the misfortune to speak of it to any living soul, he would take care my mouth was stopped for ever. To

himself he knew I would never speak of it under any circumstance.

"I did not forget this. But things did not rest here.

"Our voyage continued. Cape Horn was doubled, we arrived at the latitude of the Rio Negro, and it was necessary to put in for water. One afternoon the captain went ashore with Kélern, and at his request the boat reported him dead, his head having been cut open by a hatchet. Kélern said he had left the captain in the shade of a rock, while he went off to see to the watering, and when he returned he found him in this state. This statement was corroborated by the boat's crew, but it seemed to me extremely suspicious, and from that time I looked upon Kélern as a murderer. He had, at any rate, left the men for an hour, at the time when they were occupied in filling the casks.

"The death of Captain Frézols left Kélern the command of the *Belle Irma*. He took up his quarters in the best cabin, and from that moment ruled the ship with a hand of iron. He would not tolerate the least infraction of discipline, nor even the slightest murmur. To me he hardly condescended to address a word. To the general surprise, instead of taking the ship to Europe, he steered for Bahia. And when I asked him the reason of this change of route he insulted me grossly and put me in irons for a fortnight.

"During that time we arrived in Brazil. At once, as I learnt later, Kélern discharged the crew, giving them two months' pay, and engaged another entirely of Portuguese, and then he set sail.

"The day I came on deck he asked me into the saloon and invited me to lunch with him. I accepted, with my usual feebleness. He made me drink more than was good for me, and then talked to me as follows :—

"'My dear Pierre, during the stay you have made in the hold you have, perhaps, been dreaming that I am called Achille Kélern, and that I was the mate of this ship. You are mistaken. I am called Captain Frézols, and I am the owner of the *Belle Irma*, of its cargo, and all its baulks of tulip-wood. My intention is to put in at an American port and sell everything to the highest bidder. As I am not a bad fellow, I will give you a share. If you prefer two bullets in the head, you have only to say so !'

"I need scarcely say I was utterly amazed at this speech. But Kélern's attitude left me not the least doubt on the reality of the dilemma. I said, like a coward, that it was not my fault that I had the choice between a fortune and death, and I chose—the fortune. At once Kélern became the jolly comrade he used to be. He showed me the captain's papers, which he had appropriated. He showed me the log-book which he continued to keep as if he were Frézols, and which he had had the incredible coolness to

have certified and countersigned by the French consul at Bahia. And, becoming feebler and feebler, I entered into his views, discussed his plans, and undertook to help him to the best of my power.

"Weeks went by. Without any communication with the crew, who only spoke Portuguese, I only had to do with Kélern, who was thoroughly master of me, and with little Raymond Frézols, of whom I was very fond. A surprise awaited me at Quebec. Kélern took the child ashore, was absent twenty-four hours, and returned alone. He told me on his return that he had handed over Raymond to some honest people, paying them a year in advance, and that later on he would make him a sufficient allowance. But I quite understood it was indispensable to get rid of an important little witness. Again I bowed my head, and ratified by passive complicity this abominable desertion. Happy would I have been if I could only have been sure that Achille told me the truth, and that he had really left the child among respectable people.

"From Quebec we sailed to New York. Kélern had learnt by the papers on board that neither the *Belle Irma* nor Captain Frézols was known there. He could, without awakening suspicion, dispose of the cargo of choice woods, exchange the bullion at the mint, and sell the ship. All this he did as if he were Captain Frézols,

and owner of the *Belle Irma*, by the agency of ex-Professor Pierre Gimet, who signed all the papers as a witness. The result of these different operations was eight hundred thousand dollars ; more than three millions of francs.

“When all was over Achille Kélern again asked me to breakfast with him, and spoke to me as follows :—

“‘It is as well, you fool, that you should know all the truth. It was I that gave Frézols the crack on the head ! But I have arranged for you to be looked upon as the murderer. Three of the men landed at Bahia will swear it when wanted, and give circumstantial details. You know, besides, that you alone discovered and could discover the secret of the gold in the tulip-wood. You have countersigned all the false papers relative to the sale we have just effected. Your fate is clear enough if you ever take to talking ; you will be hanged as chief criminal. To save you that, I had better, perhaps, sink you thirty fathoms, with a shot at your feet. But I know you, you are too fond of yourself, and you will keep silent. Here are some bank-notes as a present. Be off, and never let me hear of you again.’

“Must I say it ? The speech did not surprise me. I half expected it. I should have been astonished if it had been otherwise. I knew that Achille Kélern need not kill me to get rid of me. I dared not object. I took the

reward of the crime in which I had been an accomplice, and I departed.

"Through the two Americas I bore the terror and remorse which have never since left me. Soon I began to think I was going out of my mind, and I remained as helpless of action as of thought. But one day I found myself without money, and I had to work for more. I tried all trades. Sometimes I was a teacher of languages; sometimes a Californian gold-digger; sometimes a navvy on a Canadian railroad; sometimes an oil-seeker in Pennsylvania; but I was always weak, idle, hesitating, and torn by remorse. Never did I lose sight of the danger hanging over my head and the menaces of Kélern. Terror-stricken, wandering, starving, disguised under an assumed name, I lived the most miserable life conceivable. To stifle my sufferings I took to drink, and alcohol did its work. If it did not bring me peace and oblivion, it brought me lunacy. I felt my reason disappear. After a few weeks there remained of the miserable ruin I was, not even my human individuality. If only I can in some measure repair the evil I have done! If only I could find Raymond Frézols, the captain's son, and confess my sins, and put him on the track of Achille Kélern! But that is to ask too much. Perhaps Raymond is dead. Perhaps Achille Kélern is out of reach. All I can hope is, that if ever this mournful confession falls into good hands, it will receive the

publicity of the press, to clear the victim and unmask the scoundrel, if there is still time.

"I desire it, and I hope it, and I beg Raymond Frézols, if he still lives, to believe that in spite of appearances, and guilty as I have been by my weakness, I have never ceased to venerate the memory of his earthly parents and to love him."

CHAPTER XIX.

HE MUST GO.

AFTER reading the manuscript, while the train hurried along at full speed, Raymond remained almost overwhelmed at the posthumous revelations of Peter Murphy. So the veil which had for so long hidden the drama of his infancy had at last been rent. His father had been murdered by Achille Kélern! He himself had been systematically abandoned, and then robbed of a fortune by the same Kélern! And now this man, this bandit, was again on his path, and was about to marry Madge!

Raymond did not doubt this for an instant: the mate of the *Belle Irma*, the Breton sailor of years ago, and Le Comte de Kélern were one and the same. Everything showed it, the vague resemblance he had noticed in the photograph shown him by Alice Cooper, the identity of the Christian name and the birth-place, the fact that the fortune had been acquired in the Australian gold-fields. Yes, acquired by blood and guilt, by robbing a defenceless

child ; and it was by this that the scoundrel was able to play the part he was playing to-day. Here was an account to settle.

But for the moment Raymond ceased to think of him. He thought of the strange circumstance that Peter Murphy, or rather Pierre Gimet, the friend of his childhood—traitor, it is true, to his duty, and also guilty of crime, but at least repentant and unhappy—had come to die at Drill Pit, wearing on his heart the proof of his complicity. In that there was evidently something more than coincidence. The poor madman had been drawn towards Raymond by an obscure instinct when he had met him in the course of his wandering life among the mining centres—like him, he had thought there was some resemblance in voice, in bearing, in the look of this human ruin something of a mysterious past. It was heartrending !

Raymond saw himself as a child playing on the deck of the *Belle Irma* with this Achille Kélern, who had killed his father, and had taken him through the streets of Quebec to the Falls of Montmorency. He could see him as he was then, this Kélern, and if he were to meet him after these fourteen years he would recognize him and spring at his throat. A tall man, thin and pale, graceful in build, notwithstanding his being so thin ; a long face lighted by two strange eyes, never to be forgotten, of a steel blue, like the blade of a knife. Yes, even supposing,

that the fourteen years had brought about great changes in his appearance, even supposing he had become stouter, that his almost hairless face had become hairy, that his features had changed after so long a time, Raymond felt he could recognize those eyes.

But he had not recognized Pierre Gimet! No, because he had not been warned; and yet he had been attracted by some inexplicable force towards this equivocal personage, and felt in a confused way that he had been connected with his past life. But with Achille Kélern it would be different. At the first glance he would be able to say, "There is the man! There is the murderer! There is the thief!"

Just then the train stopped at Elmira for a few minutes. And in response, as it were, to the young Frenchman's thoughts, five or six newsboys came along the cars, brandishing the *Leviathan Chronicle*, and other New York newspapers.

"Special edition!" they shouted. "This morning's *Leviathan Chronicle*! All the details of the wedding of Miss Curtiss, the American beauty, the daughter of the petroleum king, with Le Comte Achille de Kélern! Portraits of the bride and bridegroom! Views of Kélern Castle, in Brittany, and Curtiss House, in New York! Special edition!"

Raymond made a bound at the nearest paper boy. To

seize a copy of the journal, throw the vendor a dollar, which was pocketed like a shot, and whip open the sheet with a feverish hand, was the work of an instant.

Scarcely had he set eyes on the portraits than his last doubts vanished. Beside the charming head of Madge, whose eyes seemed to smile on him, were the features of Achille Kélern, as he remembered him. There was the long face still made longer by the pointed beard, and the keen look of the mate of the *Belle Irma*. The face had kept its thinness, the temples were slightly bald, but the general character of the physiognomy was unchanged. It was the same man. Madge was to marry a murderer, and a thief—and that to-morrow!

This abomination must be prevented at all cost! The very thought of it could not be entertained! Poor Madge! All her faults were forgiven in a moment. Raymond saw only the disproportionate punishment that threatened her innocent vanity. She, so proud, to find herself married to a scoundrel sought by the gallows! What humiliation! She would never survive it! Already he saw her overwhelmed with shame, dead of chagrin, pale and cold in the grave. Everything; everything must be done rather than that! He would telegraph to Ebenezer, tell him everything, beg him to put off this odious marriage, and at least wait for the result of the judicial inquiry based on Peter Murphy's confession.

Yes; but if the telegram did not arrive in time! If Ebenezer did not believe it! He knew the devoted affection with which Raymond regarded his daughter, and might look on it as a manœuvre to prevent the marriage. Perhaps he would think his young partner was mad! There are things that a letter, or verbal explanation, can make real which a telegram sent letter by letter will only make confused.

Was it likely at first sight that this Breton castle owner, this man of the world, this great local magnate, known all through the country, was a common assassin! What chance was there that Ebenezer Curtiss, proud of this marriage, infatuated with the position of his future son-in-law, would decide without the fullest information to stop a ceremony already prepared for, and dismiss the guests to talk of so terrible a scandal? It was possible, perhaps, but it was not certain, and it was not likely.

Raymond must have it a certainty. The marriage must not take place! He must see with his own eyes Ebenezer convinced and Madge saved!

To do that there was but one means, and one only—the tube through the Atlantic. To put himself in one of the cylindrical cases prepared for the Great Dane dog, and which had not yet been used; to trust himself to the submarine torrent of petroleum; to arrive with the speed

of the lightning at Val Tregonnec, and there to raise the hue and cry—that is what Raymond would do.

It was hazardous, of course. The thought of shutting himself up in a coffin of iron, to trust himself without hope of return in a pipe six thousand kilometers long to the tender mercies of the Niagara, was enough to make the bravest turn pale. Never had a living being accomplished such a voyage under the ocean. But after all there was no reason why he should not accomplish it if all went well. And even if a catastrophe occurred, Raymond would a hundred times have preferred death to the thought of not having risked everything for Madge's honour.

He must go, then ; that was decided. The idea had no sooner presented itself to his mind than it was irrevocable. Twenty secondary arguments suggested themselves to confirm his resolution. Raymond would have sent a dog as the first to journey through the Atlantic ; why did he not go himself ? Was it not much nobler and more conclusive ? And here was a solemn triple or quadruple duty to fulfil, to hinder the hateful marriage, to render the Curtisses an invaluable service, to unmask an infamous scoundrel, to avenge the best of fathers. If he had hesitated an instant, he would have put aside the doubt as an unworthy weakness. And already he was thinking of the practical part of the scheme.

Soon he was busy with his preparations, with the calm

of a true man of action, and at the outset he went to the dining-car and had a simple and substantial meal. Cassoulet, who shared in the repast as usual, noticed that his chief drank neither wine nor coffee, but simply a glass of beer. This was always Raymond's way when he wished to be in full possession of his muscular and mental strength.

It was nearly nine o'clock when the train entered the station at New York. Thirty minutes later the travellers reached Far Rockaway; and Raymond at once gave orders to prepare the cylindrical cases. He examined them with scrupulous care, chose the one that seemed to be the most comfortable, put in it a few papers, a flask of brandy, a tablet of chocolate, a volume of poetry he was reading; and then he lighted the electric lamp. These preparations over, he told the foreman and workmen at the reservoir that he was going to enclose himself in the case, and entrust himself to the stream.

The men were struck with stupor. They looked at one another, and asked if their chief had gone mad. But for a long time they had been accustomed to obey without questioning, and they did it now.

Cassoulet was quite pale, and his lips trembled.

"Won't you take me with you, Mr. Raymond?" he asked in a quiet voice.

"No, my dear boy; that is not possible. Another time, perhaps. But for this trial trip I must be alone.

Good-bye, my boy. I shall probably be back in eight or ten days by the first boat from Havre. Take care of Romper, whom I leave behind," added he, giving a friendly pat to the huge dog who had watched all he did, and also to the lad, who could hardly restrain his tears.

The cylinder, with its reservoirs of compressed air and accessories, was ready to be placed in the case beneath the transatlantic tube. Raymond crawled into it, and lay down on the leather mattress.

"Announce my departure at Val Tregonnec, and tell them to look out for me," said he quietly to Cassoulet. "As soon as I arrive, you shall have news of me through the cable."

And he shut down the lid of the cylinder, which was at once hermetically screwed down.

Ten o'clock was striking from the neighbouring clocks—ten o'clock at night. Two minutes later the cylindrical carrier passed without effort from the case into the tube. It was seized by the torrent of mineral oil, and swept along like lightning through the sea.

About the same time a tall man, whose face was shaded by a wide-brimmed hat, was arranging for the hire of a boat with the boatmen of Coney Island, in New York harbour. He wanted a boat of about two tons, which one man could easily manage, either under sail or oars. Having agreed as to the price, the man in the large hat put on board a very

heavy bag, which he had brought in a cab, and seemed to contain rope and a grapnel. Then he embarked and sailed off towards Far Rockaway. He managed the boat well, as if he were used to it, and the boatmen went home without anxiety.

The man was Timothy Campbell, the sworn enemy of Ebenezer Curtiss, and the presumed author of the fire the day before. Arrived in the morning at New York, he had lurked about the quayside public-houses without suspecting that he had already been reported to the police by a telegram from Drill Pit. He had breakfasted, and read at the table the same number of the *Leviathan Chronicle* which contained the account of the wedding fixed for next morning. The account gave Timothy a paroxysm of hatred against his fortunate rival.

"Always him!" he said. "His hated name pursues me even to New York! Is the man always to succeed? His insolent prosperity sets me at defiance every hour of the day. I cannot even breakfast at an obscure tavern without his name rising in front of me. It is intolerable! Now he must have a grand seigneur for his son-in-law. His fool of a daughter will be Madame the Countess, and have two reasons for looking down on people quite as good as she is. He is choked with success, is he? Is he invulnerable? Yesterday I thought to give him a blow with the fire! Mistake! He will scarcely notice his loss. The damage

is only five hundred thousand dollars, says this rag of a paper. And his tube is worth sixty or eighty millions—"

Timothy crumpled the *Leviathan Chronicle* with a hand that shook with fury. But soon he smoothed it out and read something about the marriage which drove him almost mad again. All at once an idea occurred to him.

"Why should this tube be allowed to go on? It would not be difficult to blow it up, and settle Ebenezer. That is the way evidently—a trifling amputation would cure this quarrel."

He rose. He walked about in a state of great agitation.

"Just the thing for this very day," he said between his teeth. "In the middle of this aristocratic marriage the news of the disaster will tell gloriously! It will be my wedding present! And why not, after all? Why should I not get a torpedo like Ebenezer did to Williams' well to begin my ruin with? What can be easier than to find where the tube enters the water, and follow it for some distance, and during the night blow it up?"

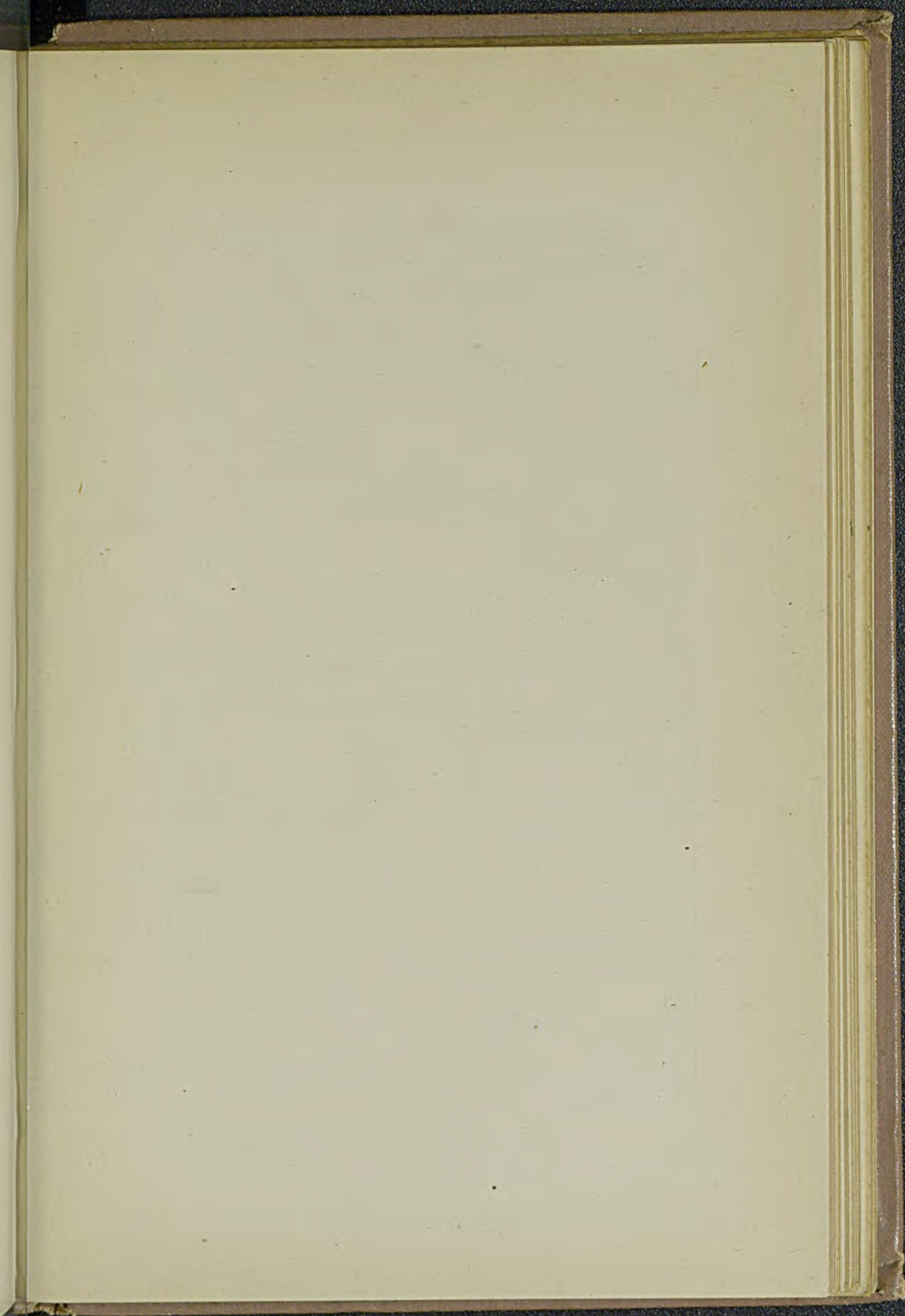
And Timothy Campbell gave a demoniac laugh. He rubbed his hands, he squared up to an imaginary enemy, and struck out at him, and he danced the double shuffle on the sanded floor, and grimaced and chuckled in his joy. The waiter, who came in at the moment, thought he had gone mad, not without reason, for hatred had mounted to his brain like drunkenness. But he resumed his seat at the

table, and finished his breakfast, but mechanically, and thinking all the time of his new scheme.

"Yes, my jolly Curtiss," he muttered as he ate. "I'll give you some nitro-glycerine, and this very day too! You shall know what it costs to attack Timothy Campbell! Get your fiddles ready, you shall have a dance. I will help you to spend a happy day to-morrow."

When he had finished his meal he paid the bill, put his toothpick between his lips, and went off to Far Rockaway. There he had only to follow the iron viaduct starting from the reservoir, to discover the direction of the tube, and see where it entered the sea. This point was marked by a mass of rocks, forming an artificial promontory. Nothing could be easier than to find it, even in a moonless night. Then Timothy took the railroad and returned to New York. He had more trouble than he expected in procuring what he wanted; a torpedo of nitro-glycerine, an electric battery to fire it with, a reel of insulated wire, and ropes and a grapnel. These purchases, and the preliminary experiments which he thought it wise to conduct in the room of an inn, took him nearly all day. Tired out, he lay on the bed for some hours, had a late supper, and then left in a cab for Coney Island, which is not an island now, owing to the number of bridges that unite it with the suburb of Gravesend, and, consequently, with Brooklyn.

As soon as he had hired the boat, he steered for the little





The grapnel hooked on to the obstacle.

promontory which he had reconnoitred in the morning, where the tube entered the sea. He now had to determine the direction taken by the tube when it disappeared under water. That was not quite an easy thing to do. He knew from the newspapers the depth at which the tube floated, but he knew no more. He had therefore to drag the grapnel behind the boat and sail about where he thought the tube ought to be until he came across it. He rowed about for five hours before he succeeded—not without danger, and with a patience as indefatigable as his hatred. All at once the grapnel hooked on to the obstacle, and the boat was brought to a dead stand.

Then Timothy's task was easy. He had only to haul on the cable till the boat was just over the tube, and to drop overboard the torpedo attached to a small cork buoy, to have the insulated wire in communication with the torpedo and the buoy and the electric battery. All he had then to do was to drift off for a hundred yards or so, and fire the mine.

CHAPTER XX.

A SUBMARINE COLLISION.

WHEN Raymond felt himself borne along by the stream of oil, his only feeling was one of satisfaction to find himself on the road. He did not doubt for an instant that the Atlantic would be safely crossed. In six hours forty-eight minutes and a few seconds he would find himself at Val Tregonnec; that was the main fact. The result was as certain as human things could be, the same causes must necessarily bring about the same results. There was no reason to fear they would not. When we take the train to somewhere, do we not think it extremely probable that we shall arrive at the hour named? It was the same here, the only difference being in the mode of locomotion; on the iron road we have to allow for the accidents and delays caused by the imperfection of the services and the number of trains that follow or cross. Here there was nothing like that to fear, for the Niagara was at one and the same time the most powerful and punctual of agents.

This manner of travelling was not without its charm. In spite of the vertiginous rapidity with which the torrent of oil bore along the cylinder, or rather on account of this rapidity, the movement was insensible. There was no jolt, no shake ; a soft gliding only, just like that of an aerostat in the atmosphere ; the very faintest noise due to the rubbing of the oil against the wall of the tube, like the sound of a distant cascade.

Inside the cylinder, the bright light of the electric lamp illuminated the smallest details, showing the leather mattress, the valves, the lateral windows, like four great eyes, and the back of the clockwork protected by glass which regulated the replenishment of breathable air. Everything worked to perfection. Comfortably stretched on the mattress, Raymond passed several minutes to enjoy the novel sensations which were all his work, his own work. Tiring of this, he opened his book and began to read. Then feeling sleepy, for he had hardly slept for thirty-six hours, he quietly went off into slumber.

When he awoke things were unchanged. The electric light still lighted the interior of the cylinder, the clockwork still moved on, the air was as pure as when he started. He took out his watch. It was thirty-five minutes past four.

"In half an hour I shall be in France," said the traveller.

And suddenly the thought occurred to him—he had not thought of it before—that Brest time differs from New York time owing to the difference in the longitude. Brest time is four hours in advance. When he arrived at Val Tregonnec it would be ten o'clock in the morning.

“Suppose the marriage has already taken place!” said Raymond, a prey to sudden uneasiness. “But no! It is not likely; it is not customary to be married so early.”

He had much to do to allay his anxiety. He reproached himself with not having gained a few minutes at Far Rockaway, in hastening on the preparations for departure, or by telegraphing from Elmira. “And Ebenezer! Ought I not to have told him why I was coming? He might have waited an hour or two in that case!”

But the stupidity was unpardonable.

He wished himself dead, he mentally cursed himself for not having taken these precautions.

But the evil was done; all he could do was to accept the inevitable and wait till he arrived. The moment approached. Soon a calmer view of the situation occupied the bold traveller's mind. He thought with pride of his exploit, and said that he had acted for the best as far as within him lay; that in everything something had to be left to chance and the unforeseen; and that all things considered it was not the time to blame himself when the transatlantic tube, his own creation, the fruit of his brain,

was, in all probability, to render Madge the best of services. For a few moments his mind dwelt on this important matter. With his eye on his watch, he followed the second hand as it moved round the dial, and he began to count the minutes.

"Four forty-five! Fifty! Fifty-five! Fifty-six! Fifty-seven! Fifty-eight! Here we are! In ten seconds! Six, seven, eight, nine, t—"

At this moment an appalling shock cut short the word, threw him back violently on to the leather mattress on which he had half raised himself, shook the electric lamp, and stopped the tick-tack of the clockwork.

At first stunned and stupefied, Raymond soon recovered his senses. It was to say to himself, without imagining anything else, that he had arrived and would soon float on the petroleum lake at Val Tregonnec.

But in that case he ought to feel the tumultuous movement of the whirlpool produced by the oil at the mouth of the tube, and he also ought to see the light of day through the glass windows of the cylinder.

But the cylinder seemed motionless, or, if it moved, the movement was insensible, and no ray of light came from without. The conclusion was that the cylinder was still in the tube.

This conclusion was so unexpected, so inexplicable, and,

at the same time, so terrible, that the traveller refused to admit it.

"It is not possible," he said. "Once seized by the force of the Niagara and shot into the transatlantic syphon, I must necessarily arrive. The force is continuous and constant, as well as powerful; it ought to carry me to France in the normal time, six hours forty-eight minutes and a few seconds! It cannot be that I am still on the voyage."

Raymond dared hardly formulate the logical deduction that he was no longer on the voyage; that from some unknown cause the impulse of the Niagara had ceased to act on the cylinder; that the cylinder had been suddenly stopped on its course, and was now motionless in a tube under the ocean!

When? How? At what distance from land? Little did it matter what was the reply to these insoluble questions. The fact was enough. And the fact was none the less tragic whatever might be the explanation, whatever might be the unknown details.

And so all was finished, and such was to be the wreck of so bold an enterprise. In the place of glory, fortune, happiness, a lingering death in a submarine tomb! Instead of the triumph of science and justice, Madge was to marry this wretch, this murderer, and remain ignorant of the unworthiness of him whose name she would bear. For the proofs of his crime were here in this box of iron,

drowned in the Atlantic. In place of an industrial innovation opening new paths for humanity, the first submarine tube was to be rendered useless by this inexplicable stoppage of the cylindrical waggon! In a word, the mournfullest end, the completest defeat.

During these minutes of anguish, in which the entombed man suffered as keenly as man's heart could bear, these thoughts presented themselves to his mind. He felt the bitterness of his fate; but he was not a man to refuse to give in to evidence, however cruel it might be. To the stupor caused by his discovery there almost succeeded a revolt of audacity and energy such as danger always inspires in well-tempered minds.

"There is no use in cursing the situation," said Raymond. "I am lost without resource. Shut up in an iron coffin, enveloped in petroleum, in a tube a few centimeters thick, below the level of the ocean, it is a hundred thousand to one if I ever get out. The replenishment of the air is already stopped. Asphyxia is my lot. It will cease in a quarter of an hour, and all will be over. Not till I have tried every chance of escape. If I had the hundred-thousandth of a chance, it shall not be said I neglected it. If I get out of my coffin, I shall find myself in the oil. If I get out of the oil, I shall find myself in the water. But I must not perish without a struggle! To arms!"

He drew from his pocket a strong knife, that from his

childhood he had carried, and he scraped with the energy of despair against the lid of the cylinder.

He had hardly given fifteen or twenty strokes, with the result of only blunting his knife, than a series of similar strokes close to him attracted his attention.

He listened, breathless with surprise and hope. The blows were repeated, clear, distinct, unmistakable. One would have said they were signals given against a metal wall, and that only from a few yards away.

Quite by chance he answered in the same manner.

Immediately there was a new series of strokes in reply. And, strange to say, his trained ear seized them immediately; there seemed to be a method, a plan, a sort of rhythm in this communication at a distance.

He listened more attentively. There could be no doubt! Some one was speaking in the Morse language, in the telegraphic dialect, so familiar to him. The strokes sometimes long and prolonged, sometimes short and sharp, served for dashes and dots. And the word they made was the one of all others he expected to hear.

It was *Cassoulet*.

"Cassoulet?" he asked himself. "I must surely be dreaming. Whatever are they signalling the poor boy's name for? Unless it is to advise me of coming help, a way of saying they know I am here. But what a strange formula!"

He telegraphed by knocking on the lid,—

“Do not understand. Repeat message.”

The reply came at once,—

“Cassoulet is here, close behind you.”

A moment of amazement, and Raymond understood all. The unhappy boy had jumped into the second cylindrical waggon, and followed the first at a few minutes' interval. He had come full tilt against him, and this explained the shock that had taken place. But why the stoppage? And what was the cause? The problem remained insoluble. One thing only appeared clear—that the catastrophe would be worse than he had thought. Instead of one victim, there would be two.

His thoughts were interrupted by a third message in shorts and longs,—

“Romper is here, too; he is behind me.”

This time the news was so incongruous that Raymond could not help smiling sadly.

“Poor little fellow! He little knows to what a terrible end he and his dog have come.”

“Shall we soon get there?” asked Cassoulet.

He received no reply. Raymond reflected, his head between his hands. He tried to find the connection between these phenomena—(1) the boy and the Great Dane behind, (2) the cylinders stopped in the tube, and this connection he could not discover.

"Is it the Niagara that has stopped?" he asked, "or is it some accident at Far Rockaway? Has the scoundrel Kélern been informed of my arrival by Ebenezer, and scented the danger and stopped the tube? In any way we are lost! Poor boy! Poor boy! I dare not tell him—what would be the good? He will know soon enough."

Raymond's thoughts were already becoming less clear. He felt a general torpor and a significant heaviness of head. The air of the metal box began doubtless to grow unfit for respiration. Asphyxia was rapidly approaching.

"Have you any air?" he asked his neighbour almost mechanically.

"Yes," answered Cassoulet. "And you, have you not any?"

"Not much," replied Raymond, evasively.

He would not unnecessarily be the cause of grief to his unfortunate little friend, and he said to himself that the hour of despair would come quite soon enough. The uselessness of all effort to speak through his tomb's quadruple wall, solid and liquid, appeared clearly to him. He abandoned himself to his fate, and fell back on his bed, motionless, eyes closed, panting for breath, head heavy with vertigo, and waiting for death.

"Mr. Raymond," signalled Cassoulet, uneasy at the silence. "Mr. Raymond! Do you not hear me, Mr. Raymond?"

He struck harder and harder, but it was in vain ; he obtained no response.

Then, for the first time, the thought occurred to him also that things were not going as they ought to do ; and fear seized upon him.

"Mr. Raymond !" he wildly rapped. "Mr. Raymond ! For mercy's sake reply."

The black silence was terrifying. The boy could not understand it, and he burst into tears.

CHAPTER XXI.

THE LAKE OF PETROLEUM.

AT Val Tregonnec great was the anxiety. Ten o'clock had just struck. Sixteen minutes ago the traveller announced from New York ought to have arrived, and there was no trace of him.

But there was a much more serious and suspicious phenomenon: the stream of petroleum no longer flowed; it had suddenly stopped at forty-three minutes past nine.

The engineer had at once telegraphed to Far Rockaway, but had received no reply. The communication by cable seemed interrupted.

These accumulated facts caused great excitement among the staff of the pneumatic works. The excitement would have been great indeed if nearly the whole staff had not been off to the wedding. Among the few on duty at the mouth of the tube the fear of a catastrophe increased from second to second.

An old foreman, who knew Raymond Frézols and felt

for him the greatest professional admiration, a certain Maurice Benoist, was particularly concerned about it.

"Something unusual has occurred," he said, shaking his head. "It is not natural that the oil stream should stop like that without their advising us of it, and still less that our telegrams should remain unanswered! If only we could explore the tube!" he added, advancing to the great iron foot-bridge, which formed a sort of landing-place a few centimeters above the level of the petroleum lake.

But he soon gave up the idea of such an exploration. It was almost hopeless, considering the length of the pipe, its narrowness that rendered entrance difficult, and the inflammable liquid with which it was saturated prevented a lantern being used.

Benoist was reduced to his thoughts. With a melancholy look at the open mouth of the tube, he was imagining the most doleful hypotheses as to what was passing within that black hole.

Suddenly he pricked up his ears.

There was a dull, distant sound like a tinker's hammer on an iron plate. And it seemed to come from the depths of the sea, and to be carried along by the tube. The old foreman listened eagerly, placing his ear against the side of the syphon. This time there could be no doubt. There were strokes inside; a sort of methodical, rhythmical tapping that only a human hand could produce.

Could it be possible that Raymond was there almost at the end of his journey, stopped by some unknown cause, and a prisoner in his cylinder?

Evidently that was the only plausible explanation of this unusual circumstance; and Benoist saw it at once.

He called for aid, and soon an engineer and two workmen stood beside him on the bridge.

They also distinctly heard the blows. They also were of opinion that the blows must be a signal from the belated traveller. But this explanation brought him no help, and according to all appearance help was urgently needed.

Already the knocking had ceased! Perhaps Raymond Frézols had become a prey to asphyxia!

The four men, pale and anxious, looked at each other without a word, and figured each to himself the drama of the submarine coffin. But suddenly Maurice Benoist was touched by a feeling of revolted humanity.

"It shall never be said that I left him to perish without trying to get him out of that!" he exclaimed, taking off his coat. "I am going in."

And without another word he led the way into the tube and began to crawl along it.

The enterprise was easier than he thought. The tube, now quite empty, remained impregnated by the mineral oil which perfumed the atmosphere in anything but a

fragrant way ; but the oil facilitated the movements of the explorer, to whom it was a great help. He had not gone many yards on his hands and knees, and left behind him the light of day, when he perceived in front of him, at a distance difficult to estimate, but which could not be great, a light, of the nature of which there could be no doubt. It was Raymond's electric light projected against the walls of the tube through the windows.

This was an encouragement for Maurice Benoist to persist in his courageous attempt.

In two minutes he touched the head of the cylinder, and knocking on the casing, he shouted cheerily,—

“Are you there, Monsieur Frézols ? Courage ! Here is help !”

He received no reply ; or, rather, the reply came from further on, from Cassoulet, who, hearing the noise, began to signal again.

Benoist was a man of resolution and experience. He lost no time in inquiring into the mysterious state of affairs. Seizing the front of the cylinder by the head of a screw he found under his hand, he began to drag it back towards the mouth of the tube.

The slope of the syphon, the form and relative lightness of the cylinder, the lubrication of the walls by the mineral oil, made the labour easy ; but when Benoist reached the bridge he was almost exhausted.

"Here you are! Open the case quickly! Poor Mr. Frézols has not answered me!" said he, panting, oily, and odoriferous, but radiant at his exploit.

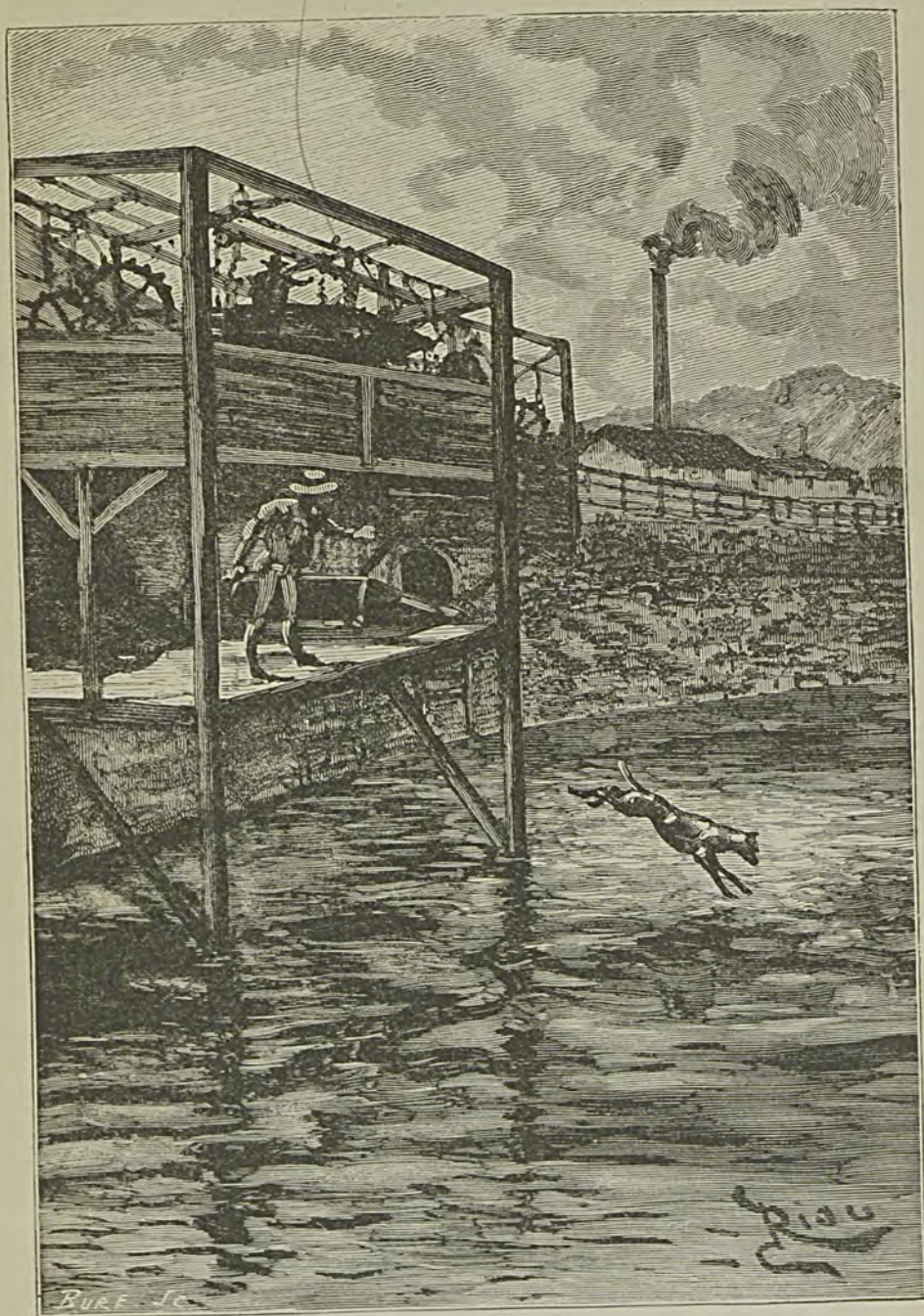
The engineer and the two workmen dragged out the cylinder. To their surprise they found it followed by another jammed into the compressed air apparatus, and this was followed by another held in the same way. They looked like the trucks of a miniature train derailed and telescoped, to speak technically.

There was no time to lose; they hastened to unscrew the lids. The first cylinder they opened was Raymond's, who lay on the mattress pale, with his eyes closed, almost inanimate, but happily, still breathing. Then Cassoulet's, who had never wanted for air, and jumped out of his prison like a bird from his cage. Last came Romper, who, with a vigorous leap, jumped into the petroleum lake, and began to swim ashore, evidently delighted at being again at large.

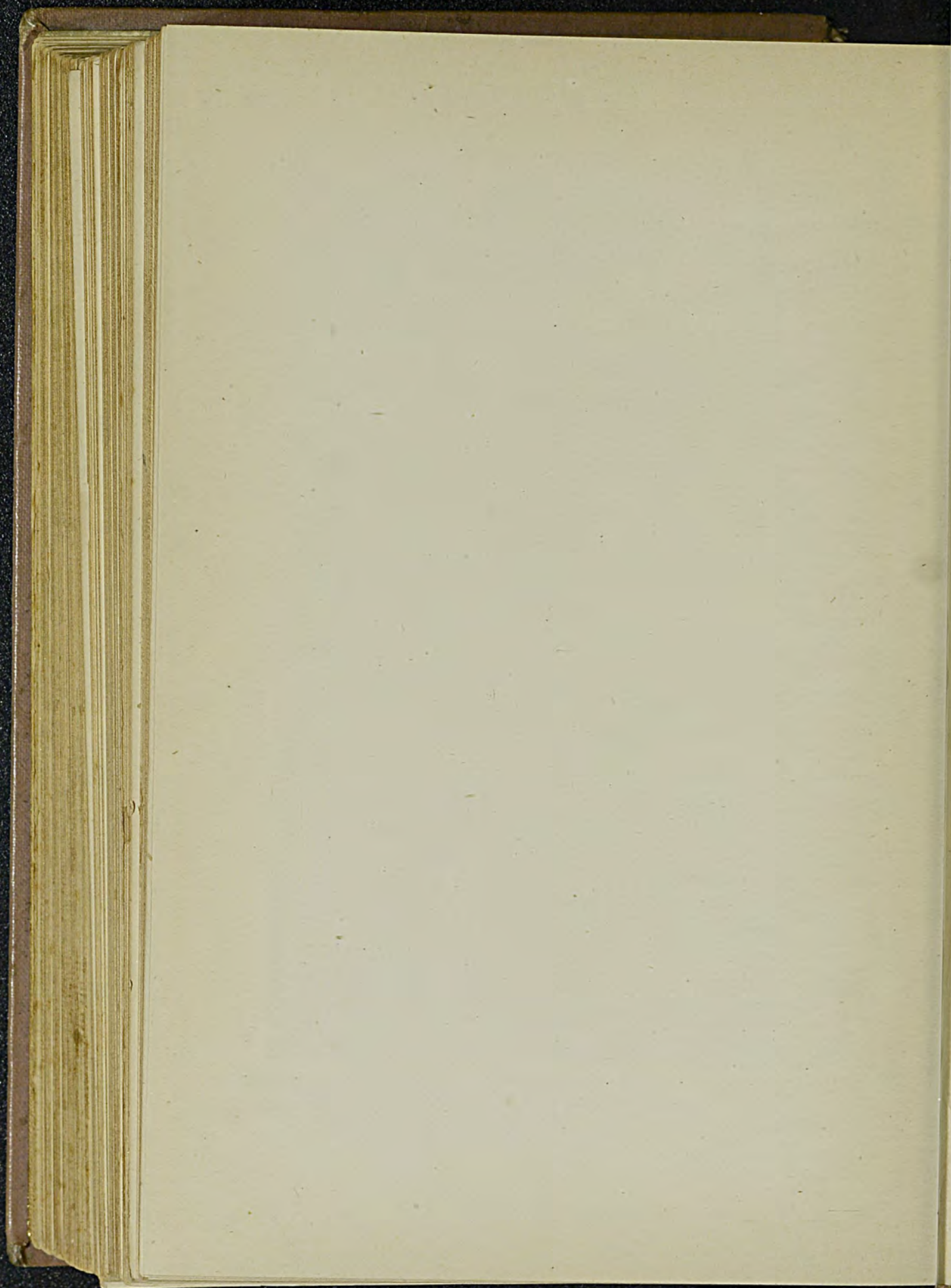
The men crowded round Raymond. They took him on to the wharf; they rubbed his limbs, and blew air into his lungs, as if he had been saved from drowning.

He was not long in coming back to life. He breathed a deep sigh, opened his eyes, and looked around him.

On the right were the red-brick buildings, the engine houses, the lodgings of the engineers and workmen; on the left was the lake, two or three kilometers across,



Jumped into the petroleum lake.



bordered by a stone quay, and on it a wooden enclosure ; against the sky, behind the sun already high on the horizon, a familiar outline of hills.

"Val Tregonnec ! I am at Val Tregonnec !" said Raymond, to himself.

And suddenly remembering everything, the accident, the delay, the urgency of his errand, he rose on his elbow and asked,—

"What time is it ?"

"Twenty minutes past ten," said the engineer.

"And the wedding—where ? At what time ?"

"At eleven o'clock, at the Mairie at Brest."

Raymond jumped to his feet by an effort almost superhuman.

"It is necessary that I go there, this instant," he said.

The engineer would have stopped him, at least to take some cordial.

"This will do," he said, putting to his lips the flask of brandy he had with him. "My papers and a vehicle of some sort, I pray you!" he continued, in a tone which left no room for further insisting on his remaining.

"Mr. Curtiss," declared Maurice Benoist, "has left a carriage for you. He waited five minutes for you, but ten o'clock struck, and it was time to go. He had to leave with the others."

The foreman said all this quite innocently, as if waiting

five minutes, more or less, for a traveller from America by the submarine train was the most ordinary thing in the world.

Raymond made no remark on the strangeness of the affair. Followed by Cassoulet, who had not come so far to let him slip away so easily, he jumped into the carriage and said to the coachman,—

“To the Hôtel de Ville, Brest! Drive your horses to ruin if necessary, but get there before eleven o’clock.”

At the tone of these words the man saw it was a question of life or death, and went off at full gallop.

“Eight kilometers!” said Raymond, between his teeth. “It will be fearful if we do not arrive in time. Thirty-eight minutes past ten!” he continued, looking at his watch, which had not been stopped by the accident. “That gives us twenty-two minutes, supposing the maire is punctual, which is not the custom of municipal magistrates.”

He began to breathe more freely, and to hope that his voyage had not been in vain.

“Lucky we were wrecked so near to port,” he said to Cassoulet.

And then, perceiving that the presence of the boy on the road to Brest was anything but regular, he continued,—

“Will you please explain, sir, how it is that you are here with Romper against my positive orders?”

Cassoulet was expecting a question of this kind, and his contrite mien showed that he was fully conscious of his fault.

"Well, Mr. Raymond," he replied, rolling the corner of his vest between his fingers, "I do not know how to explain it to you. But the fact is that when I saw you disappear in that black hole at Far Rockaway I felt I could not live without having news of you, and that I could not even wait till the morning. Something told me that things would not go well. If Mr. Raymond was to perish, I thought I might as well perish with him. If he arrived all right, he is so good that he will forgive me for having followed him. The second cylinder was there, open, and all ready. I jumped in, and off I came. As to Romper, I assure you I did not bring him with me. He must have come by himself, or rather the foreman must have put him in and sent him after us." And Cassoulet added this information with a virtuous air, as if it were a point of the greatest importance.

"Romper probably had similar reflections to yours!" said Raymond, pretending to make fun of his little comrade, but feeling deeply this unhesitating devotion. "What remains inexplicable about all this," he said, a moment later, "is why we remained more than a quarter of an hour motionless in the tube, and what caused us to come out of it."

"What caused us to come out of it was, I believe, the very opportune aid of foreman Benoist, at Val Tregonnec; but what caused an accident I really do not know, and no one was more astonished that I was at the shock."

"You also felt it?"

"I think I caused it," said Cassoulet, very red, "for it was evidently the shock of my truck on yours that produced it."

"But for your truck to fall on mine there must have been some cause which stopped them both, do you not understand? They ought to have followed each other without touching to all eternity. And it is this cause of stoppage common to both that it is impossible for me to understand."

"While they were looking after you," said Cassoulet, "I heard the engineer say that the oil had stopped running at forty-three minutes past nine."

"Indeed!"

"And that telegraphic communication with Far Rock-away was interrupted!"

"Then it is quite clear something has happened to the tube!"

"Anything serious?"

"I am afraid so."

"In that case it cannot be used any more, and we shall

have been the first and last to come through the Atlantic, from New York to Brest, in seven hours."

"That point of view is very flattering to the passengers, but not very consoling to the proprietors," said Raymond, suddenly becoming anxious again.

At the moment the carriage, which had been speeding along at full gallop all the time, suddenly stopped dead, and the travellers could see that one of the horses had fallen. The driver stormed and fumed, and jumped down from his seat, and tried in vain to get the poor horse on its feet.

"Accidents were made for me!" said Raymond, seeing at a glance it would take at least ten minutes to get on the road again.

"We shall not get to the end, if we go on like this!" he said, stepping down to help the man unharness.

And seeing that one of the horses was not hurt, he slipped off most of the harness, and, jumping on its back, went off at full gallop towards the town.

"Well!" said the coachman, when he recovered his tongue after quite a minute's astonishment; "that is what I call free and easy!"

"It saves your hurrying the horse that is left for you to take me to the Hôtel de Ville!" replied Cassoulet, philosophically.

The man was wise enough to look at the affair under

this consoling aspect, and, getting the horse up, continued the journey.

Meanwhile Raymond was approaching Brest. He entered it, and galloped towards the Hôtel de Ville. The townsfolk, astonished, came out of their doors to see this barebacked horse tearing along the road under the pitiless urging of its rider. Luckily Raymond knew the way, having been in the town before. At three minutes past eleven he reached the steps of the Hôtel de Ville.

Leaping off his horse, he bounded up the steps.

"The room where the wedding is taking place?" he asked, as he entered.

A policeman pointed it out, and twenty seconds later he had entered it.

The room was literally full of the fashionable world. But Raymond saw only the maire, on a daïs, wearing his scarf, and asking the sacramental question of a vision in white bowing towards him,—

"Susan Henrietta Madge Curtiss, do you consent to take as your husband Henri Georges Achille de Kélern here present?"

Raymond did not wait for the reply.

"No, Monsieur le Maire, she does not consent!" he shouted in a sonorous voice from the threshold of the door as he passed it. "Achille Kélern is a thief and a murderer. I have come from New York express to

prove it. Miss Curtiss is the daughter of an honest man. She will never marry this scoundrel!"

A shell fallen into the room could not have produced more astonishment than this interruption. All heads were turned towards him who had made so terrible an accusation. There was a moment of stupor. Then the maire, thinking he had to do with a madman, was about to give the order to arrest him, and proceed with the ceremony.

But Ebenezer Curtiss had seen who it was.

"Raymond Frézols!" he exclaimed.

At this name which every one knew as that of the illustrious author of the tube, a movement of curiosity and sympathy swept through the crowd, which opened to let Raymond pass to the daïs.

"Ebenezer Curtiss, and you, Monsieur le Maire," Raymond said, "I charge before you Achille Kélern, here present, with having murdered my father, Raymond Frézols, captain of a merchantman; and I charge him with having by means of forged papers, public and private, sold for his own profit the three-masted barque *Belle Irma* and her cargo, the property of my father, and my heritage! I have here the proofs of what I say, and I am going to establish the charge in justice—"

"This young man is mad! I do not know him. Monsieur le Maire, I require you to eject him and proceed with the marriage!" stammered Madge's intended.

His face was lividly pale, and his terrified eyes were fixed on Raymond.

"You know me, Achille Kélern," said Raymond, "the day you took me by the hand through the streets of Quebec, to abandon me and steal what was mine from me—after having with that same hand assassinated my father! And I know you! Look at him, gentlemen! Look at his traitor's face, and see if his crime is not written in it!"

In fact the rascal's face was, at the moment, a complete confession. Ghastly, haggard, terror-stricken, he seemed to see before him the spectre of the man he had killed. Involuntarily he turned towards the door as if to measure the distance which separated him from it and attempt to escape by flight from the punishment that awaited him.

For a year he had heard the name of Raymond Frézols—at first in connection with the transatlantic tube, and then as the friend and partner of Ebenezer Curtis. The name had always been to him a sort of nightmare. But never had the idea occurred to him that Raymond had a suspicion of the tie that united one to the other.

Left when quite a child at the Falls of Montmorency, and ignorant of the crimes that had preceded and followed his being abandoned, Raymond could not logically have any idea of them now he was a man. And none the more

would he be likely to recognize in Madge's husband, if he ever met him, the sailor whom he had known so long ago as the mate of the *Belle Irma*. "In any case," said Achille, "I can easily invent and explain my conduct and my disappearance. I can have been called from Quebec by an unexpected engagement, I can have written letters that have not reached their address, shipwrecked in Australia, worked at the diggings, where I made my fortune. Anyhow he must accept my explanations, and if he does not, why, there we will remain, that is all." That the young engineer should know anything at all of the murder of Captain Frézols and the fraudulent sale of the ship, and that he was the author of the crimes, he never imagined for an instant. It did not appear to him to be possible. And for it to be known there must have happened a meeting with Pierre Gimet, the sole depositary of the secret!

And so Achille Kélern was even more stupefied than astounded at what had happened. It seemed like a throw of the dice, a paradox of destiny.

"There is, then, an eternal justice!" his appearance seemed to say.

Many of the magistrates of Brest, who were present at the nuptial ceremony, advanced into the semicircle and consulted in an undertone with the maire. One of them asked,—

"Do you bring any proofs with you of these grave charges against Le Comte de Kélern?"

"Here are the proofs," said Raymond; "I have come through the Atlantic in seven hours to bring them in time"—and he showed them the posthumous confession of Peter Murphy,—“and I only ask to be allowed to establish them at the cost of my liberty.”

The throng gathered round the two adversaries. Madge stood there like the others, amazed and disgusted at her intended.

"Monsieur de Kélern," she said in a half whisper, "speak! Refute this abominable charge! Say that it is impossible, that it is false! and we will believe you—"

"Will you not rather believe me, Miss Curtiss?" said Raymond sadly. "Do you think I would have come from so far and by so strange a road to bring you this terrible blow, if I had not, alas! a hundred times good reasons for it? Can you think that?"

The maire saw the necessity of putting an end to this painful scene.

"Monsieur de Kélern," he said, "and you, monsieur, come to my office, if you please. It is important for everybody's sake that this affair should be immediately cleared up."

He led the way out, and the chief persons interested followed him. Not, however, until Raymond had ad-

dressed to Mrs. Curtiss and Madge, who never moved, a respectful salute, in which could be read at the same time his deep regret at this public execution and his firm conviction of its necessity.

CHAPTER XXII.

THE EXPIATION.

IN the office of the maire, where the public prosecutor appeared without delay, Raymond shortly deposed to the facts within his knowledge ; the tragic death of his father ; his own desertion in the neighbourhood of Quebec ; the sale of the *Belle Irma* and her cargo. He said how these facts, for so long mysterious to him, had been explained to him the evening before on the Erie railway by the reading of the posthumous manuscript of Peter Murphy. He submitted the manuscript. He showed how the statements could be verified by a consular inquiry at Quebec and New York, and pointed out that the return of Kélern to France, the position he had taken in the country, the rebuilding of his castle, and the rest, all coincided exactly with the statements as to date of Peter Murphy.

It all seemed clear as the day and irrefutable. The accused did not even attempt to refute the charges. He

contented himself with a feeble denial, asserting that he had never been mate of the *Belle Irma*, and that it was entirely a case of resemblance of names. But his appearance was so piteous, and the presumption of his guilt so strong, that his arrest was at once decided on.

At half-past twelve Le Comte de Kélern was in prison at Brest, charged with murder, forgery, and theft; and Raymond Frézols, requested to remain within call to assist in the inquiry, was free to return to Val Tregonnec.

As he came out of the office of the maire he found the marriage room empty. As soon as Kélern's arrest had been decided on, the maire had informed the Curtiss family, who had immediately retired, and soon the brilliant throng convoked for the ceremony had followed their example.

But in front of the Hôtel de Ville Cassoulet was waiting with the carriage, which again had both horses in harness. The coachman, with admirable foresight, had even given the horses a feed of oats. It was easy, therefore, to return to Val Tregonnec, where Raymond found the Curtisses at table with the engineer of the pneumatic works.

When the first moment of stupor was over, Ebenezer, his wife, and Madge herself, thought only of congratulating themselves at having escaped such a marriage. And consequently they gave Raymond the heartiest of welcomes, and had no false shame in thanking him for the

very great service he had just rendered them. They made him tell them all the details of what had passed at the inquiry before the maire, and they heard the news from Drill Pit and New York. The fire at the depôt was not of a nature to rejoice the heart of the petroleum king; but the consequences of the disaster had been so extraordinarily fortunate that Ebenezer could say with a good heart,—

“My word! four hundred thousand dollars is not too much to pay for the advantage of escaping the alliance we missed to-day — and missed by such a little, by Jove!”

This conclusion brought the conversation round to Raymond's journey, and the manner in which it had been effected. Maurice Benoist was sent for to be thanked for having so opportunely dragged the travellers out of the hole. They drank his health, and at once settled on him a small pension, that he might remember to the end of his days the excellent and courageous inspiration that had made him enter the tube. They heard Cassoulet relate his personal impressions on the collision of the carriers. They caressed Romper, who had also performed the passage through the Atlantic in seven hours, and whom a vigorous application of soap and water had disembarassed of the natural consequences of his bath in the petroleum lake. Then they talked without end of the causes possible and impossible of the interruption of communication

with Far Rockaway, and sought in vain to explain why the stream of petroleum had stopped.

For the first time in his life Ebenezer did not see in the event the hand of Timothy Campbell; and yet he was the man who had done it, as was learnt in the evening from a long telegram sent from the foreman at Far Rockaway by way of New York to Paris and Brest. The telegram was as follows:—

“We are in great anxiety as to whether the travellers leaving this end of the tube have arrived at the end of their journey. The tube was cut or destroyed this morning about five o’clock, out at sea, by the explosion of a torpedo. Several ships heard and noted the explosion, and we can fix the time exactly. The culprit is Timothy Campbell, who was arrested this morning on the wharf at Coney Island, on his return from his felonious expedition. The police had been looking for him since the day before, on account of the fire at Drill Pit, and serious charges have been brought against him. He was tracked by the police, who testify that he spent yesterday making suspicious purchases—a torpedo of nitro-glycerine, an electric battery, insulated wire, ropes, and a grapnel. At the time of his arrest this material was found still in his possession, with the exception of the torpedo and a part of the wire and grapnel. The conclusion is, he used the things missing. In fact, at the end of a few hours all the ships

entering the harbour reported an enormous sheet of petroleum, spreading over the ocean. Thousands of boats immediately went off in the hope of collecting the oil, for their own profit, be it understood, like floating goods with no indication of origin. But their hopes were deceived, as the sheet of oil enlarged so rapidly that its thickness was not enough to allow them to do anything with it. The central police office informed us of the fact at fifty-seven minutes past three in the afternoon, and we at once telegraphed to Niagara to stop the pumps. But the quantity of oil lost in the sea is enormous. There was no sign of a breakage at Far Rockaway. The first suspicion we had was the interruption of our communication with Val Tregonnec. In the opinion of competent authorities, it is to be feared that the tube is injured beyond repair. We await instructions."

The gravity of this news could not be concealed. It was ruin complete and irreparable for the owners of the tube. The mortgages on Drill Pit, the fire at the dépôt, and the loss due to the breakage of the tube, must absorb, and more than absorb, all Ebenezer's capital.

Ebenezer was too experienced a business man not to see at a glance the extent of this disaster. But the events of the morning had seemingly prepared him for every surprise, for he bore his misfortune courageously. The

deep sadness of his look alone showed what he felt as he read the fatal paper.

"Father!" said Madge, "what is now the matter?"

"Take it, my daughter!" he said. "Read it aloud!"

And when the reading was ended, he said,—

"I am at this moment poorer than the day I arrived in Drill Pit."

The two women threw themselves on his neck, and wept as they embraced him.

"My poor husband!" said the wife. "It is not for myself that I regret our wealth. I was happy enough before we possessed it. But you! But Madge!"

"My poor Madge! My dear child!" said the dethroned king. "That is the end of our dreams! I, who wanted to see you so happy, and so envied!"

Madge hid her fair head on her father's shoulder, and sobbed without saying a word. Accustomed as she had been for so long to consider riches as the chief good, she suffered deeply in her self-love at seeing herself bereft of her crown, and this humiliation, added to that of the morning, was more than she could bear.

To see her in tears was more than Raymond could bear.

"Madge!" he exclaimed, "is it you I see crying for a miserable loss of money? What matter riches when there remain honour, strength, and health. What your father

and I have done once, can we not do again? We can work, and build up a new fortune. We will work valiantly, And it will not be long!"

He put into this promise so much power and sincerity, that it went straight to the heart of father and daughter, and comforted them. Madge lifted her head, and already smiling through her tears,—

"It is true," she said; "instead of grieving over what we have lost, we ought to think of what we have saved! and saved, thanks to you, Mr. Raymond"—and she gave him her hand—"thanks to your devotion and your heroism. When I think that, had it not been for your sudden arrival I should now bear the name of a murderer and a forger, and that ruin would have come to add to my shame, I really think that ruin now is scarcely worth counting."

And so misfortune was already exercising over Madge its beneficent influence, and inspiring her with sentiments she had never experienced in her prosperity. Raymond privately noticed this, and was confirmed more than ever in his opinion of Miss Curtiss—she was good, after all; she was noble and high-spirited; it was the world in which she had moved which had masked or paralyzed her excellent qualities. He told her what he thought, and Madge understood confusedly for the first time in her life that she had often thought and acted vulgarly in thinking wealth was everything.

Whatever was the bitterness of her reflections, she was much more natural and amiable than formerly, and became again during the three days the Curtiss family remained at Val Tregonnec the Madge of Drill Pit and Yellow River.

These three days were passed in excursions in the neighbourhood of Brest, in the interval of the telegrams that Ebenezer actively exchanged with Jacob Freeman. They walked in the splendid air, they stopped to lunch in the fishermen's villages, and, owing to this physical activity, the catastrophes of yesterday only left their mark in secondary and unimportant cares. If Ebenezer ever grew melancholy, Raymond had always some new project, some inexpensive invention to realize, which he would work out on the spot, and so prove a distraction to his thoughts.

The purport of the telegraphic correspondence with Drill Pit was the absolute necessity of returning at once to America, to proceed without delay to a liquidation that had become indispensable. And the Curtisses embarked in the *White Witch*, which lay in the roadstead, and departed for New York.

Raymond, obliged to remain at Brest for the purpose of aiding justice in its work of investigation, and, besides, required by his age to fulfil his military duties as a French citizen, promised to return and put himself at Ebenezer's disposal as soon as he had completed his year's voluntariat.

The judicial inquiry was actively pursued. It made

little delay in establishing the truth of the statements in the manuscript of the unfortunate Pierre Gimet, *alias* Peter Murphy. Martin Fabre and Dame Jacinthe were still living at the inn at the Montmorency Falls. They deposed on oath as to the circumstances relating to the child, and identified the photograph of Achille de Kélern as that of the individual who had accompanied little Raymond. The sale of the *Belle Irma* at New York, the change of the bullion at the Mint, were easily proved. The French Consulate even discovered the three sailors landed at Bahia, who bore witness to the death of Captain Frézols. All these details coincided with the declarations of the manuscript. Achille de Kélern was ordered to take his trial before the Court of Assizes of Finisterre, and next April he appeared before the jury.

He was unanimously convicted of the crimes of forgery and theft, but the benefit of the doubt was given him on the charge of murder. He was sentenced to hard labour for life, and the judgment ordered restitution to be made to Raymond Frézols for the goods of which he had been defrauded, in whatever form they might at present be found.

And thus, at the end of the long procedure, he found himself the legitimate owner of the Castle of Kélern and all the lands and values belonging to it—values estimated in the inventory at more than two millions of francs.

At the time this fortune fell to him from the clouds, Raymond was serving in the 163rd of the Line as a humble corporal, he having been promoted just six weeks after he joined the regiment. He was a model soldier, liked by his chiefs and his comrades, always the first at duty, at drill, at exercise, always obliging and kind, brave and devoted. The day that the volunteers departed to their homes the colonel took occasion to say in his little parting speech,—

“Sub-officers, corporals, and soldiers,—I have nothing but praises to give you for the zeal and assiduity which you have brought to the accomplishment of your task. But I ought to make special mention of Corporal Frézols, whom I have to-day proposed for the rank of sub-lieutenant of the reserve. If the army had many men of his kind it would be invincible!”

Among those who listened to the worthy colonel there was not one who would not gladly have ratified the judgment. And while he rendered himself worthy of such praise as a soldier, Raymond had found time to give two hours' lessons a day to Cassoulet. Profiting by his stay at Brest to send him as a day-pupil to the Lycée, he made him repeat his lessons punctually to him, and the result of this affectionate collaboration was so brilliant that in less than six months Cassoulet, the little orphan—or, to give him his real name, Michel Rodière—was at the head of the

third class. His teachers stated that he would inevitably be admitted to the naval school within a year if he pursued his studies regularly, and Raymond decided in consequence to leave him at Brest when he departed for New York.

He found the Curtisses at the Niagara works, which they had decided to turn into a colossal flour-mill, with the assistance of Jacob Freeman, who had become Ebenezer's partner. The liquidation of the tube through the Atlantic and the Drill Pit property had been completed. It left the ex-king of petroleum hardly any capital beyond his activity and his commercial knowledge, and he was living in a very modest way with his wife and daughter. There were no more peach-bloom lackeys, or carriages, or horses; no seasons at Saratoga. Madge no longer had her gowns from Paris; she made them herself, and was none the less beautiful or happy. Free now from her vanity's prejudices, she was really good, witty, and charming.

Raymond was so struck by the change, and the friendliness she showed towards him, that one evening at dinner, he asked her before Ebenezer and Mrs. Curtiss, if she had given up all thoughts of marriage.

"Why this question?" she asked, with a laugh.

"Because, if it be otherwise, I might perhaps presume to add my name to the list."

"What, in spite of all my faults?"

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"You rather exaggerate your conversion."

"In spite of all your faults."

"In spite of my poverty?"

"All the more on account of your poverty. It is not your millions I love, Madge, but you. And I have good reason, too; for now you have none you are perfect in my eyes."

"And then?"

"Then, if it is not too audacious to aspire to your hand, and if the name of an honest man is good enough—"

"I shall be proud to bear it," said Madge, "that is, if my father and mother will allow me," added she, looking from one to the other.

"That is the first time she has asked my permission, and it ought to be the right one!" said Ebenezer.

Two months later the marriage of Raymond and Madge was celebrated very simply; and when they returned from the nuptial benediction the bridegroom told his wife what he had not thought fit to say anything about before, the story of the return of the two or three millions.

"What matters wealth when one has a husband like mine?" said Madge.

"My dear," said Ebenezer, "you rather exaggerate your conversion. Two or three millions do no harm to any one. They might come in for the repair of that unfortunate tube."

"Bah!" said Raymond. "We will find something else!"

Do you know they are solidifying petroleum—making it into wax and moulding it into bricks? If that is practicable, our tube will be superfluous. And besides, Timothy Campbell showed us the weak point of our invention.”

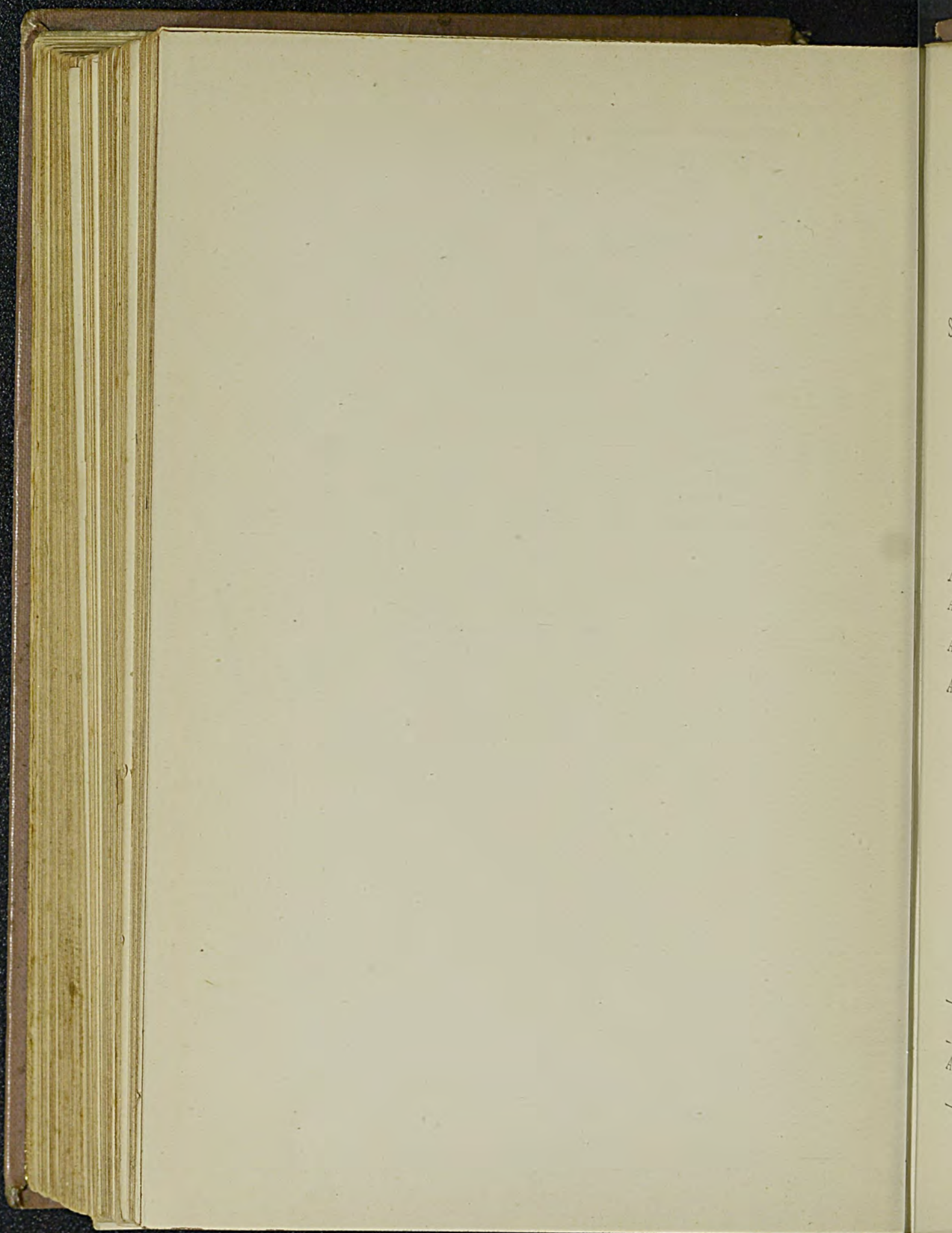
“Ah! the wretch!” said Ebenezer, in a tone of anger. “He well deserved the twenty years’ imprisonment he has got in the Tombs at New York.”

“That is true. But, on our part, we should have kept a watch on him and the hatred he bore you. One factor neglected, and we have to pay for it, in trade as in war.”

“We paid for that one too dearly, alas!” said the ex-king of petroleum, as he heaved a sigh of regret at his millions lost in the Atlantic.

THE END.

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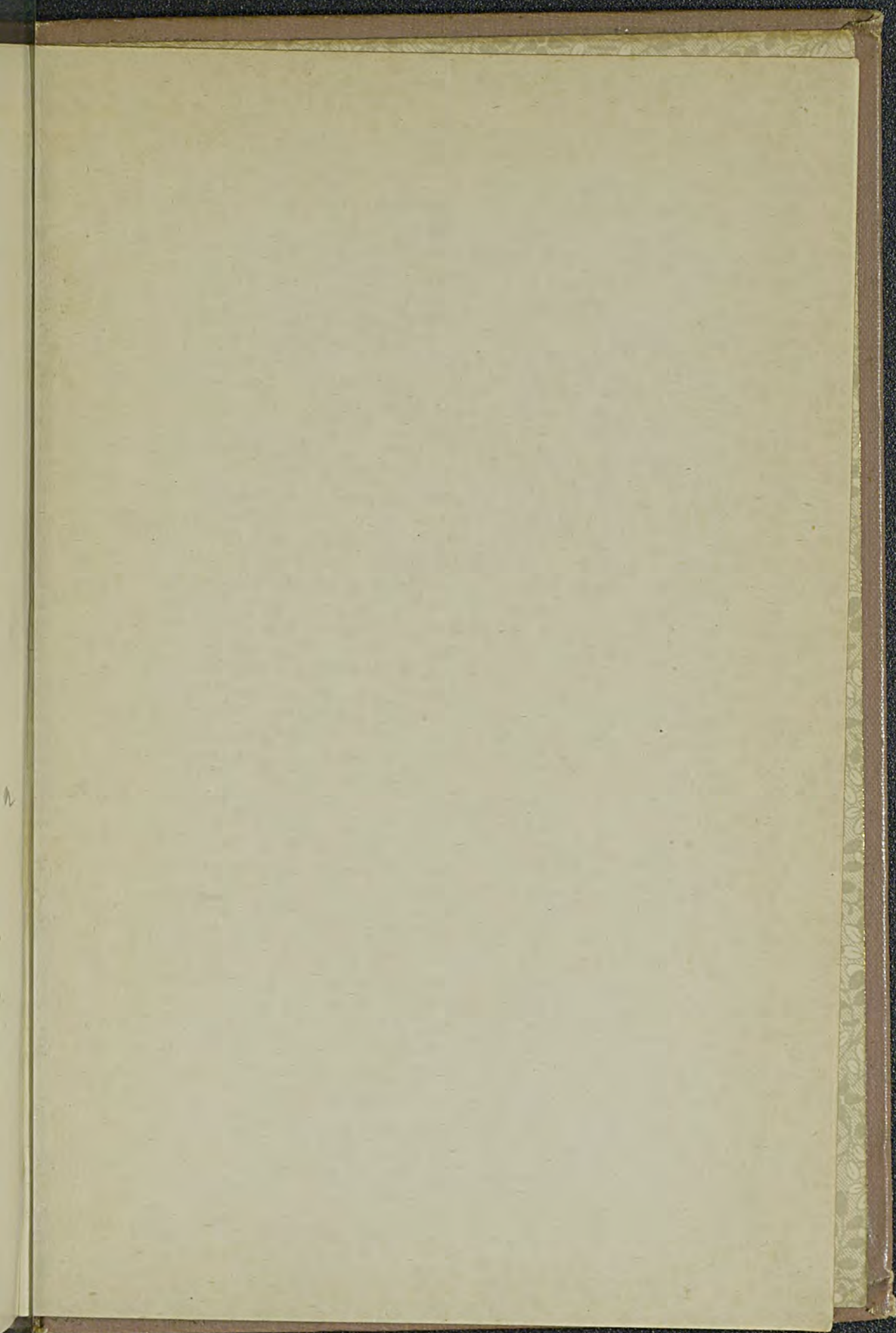
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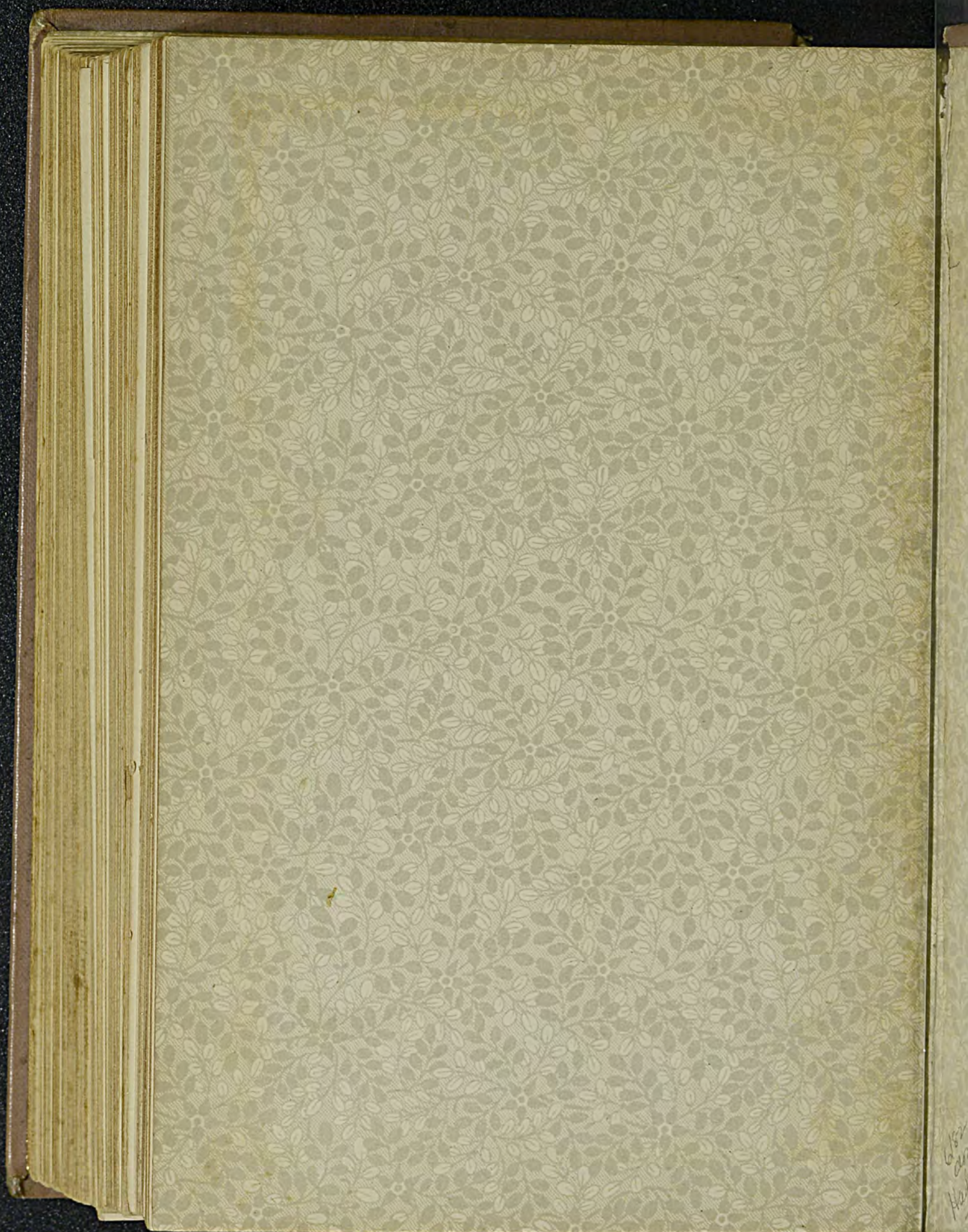
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