MASTER ZACHARIUS

CHAPTER I.

A WINTER NIGHT.

The city of Geneva lies at the west end of the lake of the same name. The Rhone, which passes through the town at the outlet of the lake, divides it into two sections, and is itself divided in the centre of the city by an island placed in mid-stream. A topographical feature like this is often found in the great depôts of commerce and industry. No doubt the first inhabitants were influenced by the easy means of transport which the swift currents of the rivers offered them--those "roads which walk along of their own accord," as Pascal puts it. In the case of the Rhone, it would be the road that ran along.

Before new and regular buildings were constructed on this island, which was enclosed like a Dutch galley in the middle of the river, the curious mass of houses, piled one on the other, presented a delightfully confused coup-d'oeil. The small area of the island had compelled some of the buildings to be perched,

as it were, on the piles, which were entangled in the rough currents of the river. The huge beams, blackened by time, and worn by the water, seemed like the claws of an enormous crab, and presented a fantastic appearance. The little yellow streams, which were like cobwebs stretched amid this ancient foundation, quivered in the darkness, as if they had been the leaves of some old oak forest, while the river engulfed in this forest of piles, foamed and roared most mournfully.

One of the houses of the island was striking for its curiously aged appearance. It was the dwelling of the old clockmaker, Master Zacharius, whose household consisted of his daughter Gerande, Aubert Thun, his apprentice, and his old servant Scholastique.

There was no man in Geneva to compare in interest with this Zacharius. His age was past finding out. Not the oldest inhabitant of the town could tell for how long his thin, pointed head had shaken above his shoulders, nor the day when, for the first time, he had-walked through the streets, with his long white locks floating in the wind. The man did not live; he vibrated like the pendulum of his clocks. His spare and cadaverous figure was always clothed in dark colours. Like the pictures of Leonardo di Vinci, he was sketched in black.

Gerande had the pleasantest room in the whole house, whence,

through a narrow window, she had the inspiriting view of the snowy peaks of Jura; but the bedroom and workshop of the old man were a kind of cavern close on to the water, the floor of which rested on the piles.

From time immemorial Master Zacharius had never come out except at meal times, and when he went to regulate the different clocks of the town. He passed the rest of his time at his bench, which was covered with numerous clockwork instruments, most of which he had invented himself. For he was a clever man; his works were valued in all France and Germany. The best workers in Geneva readily recognized his superiority, and showed that he was an honour to the town, by saying, "To him belongs the glory of having invented the escapement." In fact, the birth of true clock-work dates from the invention which the talents of Zacharius had discovered not many years before.

After he had worked hard for a long time, Zacharius would slowly put his tools away, cover up the delicate pieces that he had been adjusting with glasses, and stop the active wheel of his lathe; then he would raise a trap-door constructed in the floor of his workshop, and, stooping down, used to inhale for hours together the thick vapours of the Rhone, as it dashed along under his eyes.

One winter's night the old servant Scholastique served the

supper, which, according to old custom, she and the young mechanic shared with their master. Master Zacharius did not eat, though the food carefully prepared for him was offered him in a handsome blue and white dish. He scarcely answered the sweet words of Gerande, who evidently noticed her father's silence, and even the clatter of Scholastique herself no more struck his ear than the roar of the river, to which he paid no attention.

After the silent meal, the old clockmaker left the table without embracing his daughter, or saying his usual "Good-night" to all. He left by the narrow door leading to his den, and the staircase groaned under his heavy footsteps as he went down.

Gerande, Aubert, and Scholastique sat for some minutes without speaking. On this evening the weather was dull; the clouds dragged heavily on the Alps, and threatened rain; the severe climate of Switzerland made one feel sad, while the south wind swept round the house, and whistled ominously.

"My dear young lady," said Scholastique, at last, "do you know that our master has been out of sorts for several days? Holy Virgin! I know he has had no appetite, because his words stick in his inside, and it would take a very clever devil to drag even one out of him."

"My father has some secret cause of trouble, that I cannot even

guess," replied Gerande, as a sad anxiety spread over her face.

"Mademoiselle, don't let such sadness fill your heart. You know the strange habits of Master Zacharius. Who can read his secret thoughts in his face? No doubt some fatigue has overcome him, but to-morrow he will have forgotten it, and be very sorry to have given his daughter pain."

It was Aubert who spoke thus, looking into Gerande's lovely eyes. Aubert was the first apprentice whom Master Zacharius had ever admitted to the intimacy of his labours, for he appreciated his intelligence, discretion, and goodness of heart; and this young man had attached himself to Gerande with the earnest devotion natural to a noble nature.

Gerande was eighteen years of age. Her oval face recalled that of the artless Madonnas whom veneration still displays at the street corners of the antique towns of Brittany. Her eyes betrayed an infinite simplicity. One would love her as the sweetest realization of a poet's dream. Her apparel was of modest colours, and the white linen which was folded about her shoulders had the tint and perfume peculiar to the linen of the church. She led a mystical existence in Geneva, which had not as yet been delivered over to the dryness of Calvinism.

While, night and morning, she read her Latin prayers in her

iron-clasped missal, Gerande had also discovered a hidden sentiment in Aubert Thun's heart, and comprehended what a profound devotion the young workman had for her. Indeed, the whole world in his eyes was condensed into this old clockmaker's house, and he passed all his time near the young girl, when he left her father's workshop, after his work was over.

Old Scholastique saw all this, but said nothing. Her loquacity exhausted itself in preference on the evils of the times, and the little worries of the household. Nobody tried to stop its course. It was with her as with the musical snuff-boxes which they made at Geneva; once wound up, you must break them before you will prevent their playing all their airs through.

Finding Gerande absorbed in a melancholy silence, Scholastique left her old wooden chair, fixed a taper on the end of a candlestick, lit it, and placed it near a small waxen Virgin, sheltered in her niche of stone. It was the family custom to kneel before this protecting Madonna of the domestic hearth, and to beg her kindly watchfulness during the coming night; but on this evening Gerande remained silent in her seat.

"Well, well, dear demoiselle," said the astonished Scholastique, "supper is over, and it is time to go to bed. Why do you tire your eyes by sitting up late? Ah, Holy Virgin! It's much better to sleep, and to get a little comfort from happy dreams! In these

detestable times in which we live, who can promise herself a fortunate day?"

"Ought we not to send for a doctor for my father?" asked Gerande.

"A doctor!" cried the old domestic. "Has Master Zacharius ever listened to their fancies and pompous sayings? He might accept medicines for the watches, but not for the body!"

"What shall we do?" murmured Gerande. "Has he gone to work, or to rest?"

"Gerande," answered Aubert softly, "some mental trouble annoys your father, that is all."

"Do you know what it is, Aubert?"

"Perhaps, Gerande"

"Tell us, then," cried Scholastique eagerly, economically extinguishing her taper.

"For several days, Gerande," said the young apprentice, "something absolutely incomprehensible has been going on. All the watches which your father has made and sold for some years have suddenly stopped. Very many of them have been brought back to

him. He has carefully taken them to pieces; the springs were in good condition, and the wheels well set. He has put them together yet more carefully; but, despite his skill, they will not go."

"The devil's in it!" cried Scholastique.

"Why say you so?" asked Gerande. "It seems very natural to me. Nothing lasts for ever in this world. The infinite cannot be fashioned by the hands of men."

"It is none the less true," returned Aubert, "that there is in this something very mysterious and extraordinary. I have myself been helping Master Zacharius to search for the cause of this derangement of his watches; but I have not been able to find it, and more than once I have let my tools fall from my hands in despair."

"But why undertake so vain a task?" resumed Scholastique. "Is it natural that a little copper instrument should go of itself, and mark the hours? We ought to have kept to the sun-dial!"

"You will not talk thus, Scholastique," said Aubert, "when you learn that the sun-dial was invented by Cain."

"Good heavens! what are you telling me?"

"Do you think," asked Gerande simply, "that we might pray to God to give life to my father's watches?"

"Without doubt," replied Aubert.

"Good! They will be useless prayers," muttered the old servant, "but Heaven will pardon them for their good intent."

The taper was relighted. Scholastique, Gerande, and Aubert knelt down together upon the tiles of the room. The young girl prayed for her mother's soul, for a blessing for the night, for travellers and prisoners, for the good and the wicked, and more earnestly than all for the unknown misfortunes of her father.

Then the three devout souls rose with some confidence in their hearts, because they had laid their sorrow on the bosom of God.

Aubert repaired to his own room; Gerande sat pensively by the window, whilst the last lights were disappearing from the city streets; and Scholastique, having poured a little water on the flickering embers, and shut the two enormous bolts on the door, threw herself upon her bed, where she was soon dreaming that she was dying of fright.

Meanwhile the terrors of this winter's night had increased. Sometimes, with the whirlpools of the river, the wind engulfed

itself among the piles, and the whole house shivered and shook; but the young girl, absorbed in her sadness, thought only of her father. After hearing what Aubert told her, the malady of Master Zacharius took fantastic proportions in her mind; and it seemed to her as if his existence, so dear to her, having become purely mechanical, no longer moved on its worn-out pivots without effort.

Suddenly the pent-house shutter, shaken by the squall, struck against the window of the room. Gerande shuddered and started up without understanding the cause of the noise which thus disturbed her reverie. When she became a little calmer she opened the sash. The clouds had burst, and a torrent-like rain pattered on the surrounding roofs. The young girl leaned out of the window to draw to the shutter shaken by the wind, but she feared to do so. It seemed to her that the rain and the river, confounding their tumultuous waters, were submerging the frail house, the planks of which creaked in every direction. She would have flown from her chamber, but she saw below the flickering of a light which appeared to come from Master Zacharius's retreat, and in one of those momentary calms during which the elements keep a sudden silence, her ear caught plaintive sounds. She tried to shut her window, but could not. The wind violently repelled her, like a thief who was breaking into a dwelling.

Gerande thought she would go mad with terror. What was her father

doing? She opened the door, and it escaped from her hands, and slammed loudly with the force of the tempest. Gerande then found herself in the dark supper-room, succeeded in gaining, on tiptoe, the staircase which led to her father's shop, and pale and fainting, glided down.

The old watchmaker was upright in the middle of the room, which resounded with the roaring of the river. His bristling hair gave him a sinister aspect. He was talking and gesticulating, without seeing or hearing anything. Gerande stood still on the threshold.

"It is death!" said Master Zacharius, in a hollow voice; "it is death! Why should I live longer, now that I have dispersed my existence over the earth? For I, Master, Zacharius, am really the creator of all the watches that I have fashioned! It is a part of my very soul that I have shut up in each of these cases of iron, silver, or gold! Every time that one of these accursed watches stops, I feel my heart cease beating, for I have regulated them with its pulsations!"

As he spoke in this strange way, the old man cast his eyes on his bench. There lay all the pieces of a watch that he had carefully taken apart. He took up a sort of hollow cylinder, called a barrel, in which the spring is enclosed, and removed the steel spiral, but instead of relaxing itself, according to the laws of its elasticity, it remained coiled on itself like a sleeping

viper. It seemed knotted, like impotent old men whose blood has long been congealed. Master Zacharius vainly essayed to uncoil it with his thin fingers, the outlines of which were exaggerated on the wall; but he tried in vain, and soon, with a terrible cry of anguish and rage, he threw it through the trap-door into the boiling Rhone.

Gerande, her feet riveted to the floor, stood breathless and motionless. She wished to approach her father, but could not. Giddy hallucinations took possession of her. Suddenly she heard, in the shade, a voice murmur in her ears,--

"Gerande, dear Gerande! grief still keeps you awake. Go in again, I beg of you; the night is cold."

"Aubert!" whispered the young girl. "You!"

"Ought I not to be troubled by what troubles you?"

These soft words sent the blood back into the young girl's heart. She leaned on Aubert's arm, and said to him,--

"My father is very ill, Aubert! You alone can cure him, for this disorder of the mind would not yield to his daughter's consolings. His mind is attacked by a very natural delusion, and in working with him, repairing the watches, you will bring him back to reason.

Aubert," she continued, "it is not true, is it, that his life is mixed up with that of his watches?"

Aubert did not reply.

"But is my father's a trade condemned by God?" asked Gerande, trembling.

"I know not," returned the apprentice, warming the cold hands of the girl with his own. "But go back to your room, my poor Gerande, and with sleep recover hope!"

Gerande slowly returned to her chamber, and remained there till daylight, without sleep closing her eyelids. Meanwhile, Master Zacharius, always mute and motionless, gazed at the river as it rolled turbulently at his feet.

CHAPTER II.

THE PRIDE OF SCIENCE.

The severity of the Geneva merchant in business matters has become proverbial. He is rigidly honourable, and excessively just. What must, then, have been the shame of Master Zacharius, when he saw these watches, which he had so carefully constructed, returning to him from every direction?

It was certain that these watches had suddenly stopped, and without any apparent reason. The wheels were in a good condition and firmly fixed, but the springs had lost all elasticity. Vainly did the watchmaker try to replace them; the wheels remained motionless. These unaccountable derangements were greatly to the old man's discredit. His noble inventions had many times brought upon him suspicions of sorcery, which now seemed confirmed. These rumours reached Gerande, and she often trembled for her father, when she saw malicious glances directed towards him.

Yet on the morning after this night of anguish, Master Zacharius seemed to resume work with some confidence. The morning sun inspired him with some courage. Aubert hastened to join him in the shop, and received an affable "Good-day."

"I am better," said the old man. "I don't know what strange pains in the head attacked me yesterday, but the sun has quite chased them away, with the clouds of the night."

"In faith, master," returned Aubert, "I don't like the night for either of us!"

"And thou art right, Aubert. If you ever become a great man, you will understand that day is as necessary to you as food. A great savant should be always ready to receive the homage of his fellow-men."

"Master, it seems to me that the pride of science has possessed you."

"Pride, Aubert! Destroy my past, annihilate my present, dissipate my future, and then it will be permitted to me to live in obscurity! Poor boy, who comprehends not the sublime things to which my art is wholly devoted! Art thou not but a tool in my hands?"

"Yet. Master Zacharius," resumed Aubert, "I have more than once merited your praise for the manner in which I adjusted the most delicate parts of your watches and clocks."

"No doubt, Aubert; thou art a good workman, such as I love; but

when thou workest, thou thinkest thou hast in thy hands but copper, silver, gold; thou dost not perceive these metals, which my genius animates, palpitating like living flesh! So that thou wilt not die, with the death of thy works!"

Master Zacharius remained silent after these words; but Aubert essayed to keep up the conversation.

"Indeed, master," said he, "I love to see you work so unceasingly! You will be ready for the festival of our corporation, for I see that the work on this crystal watch is going forward famously."

"No doubt, Aubert," cried the old watchmaker, "and it will be no slight honour for me to have been able to cut and shape the crystal to the durability of a diamond! Ah, Louis Berghem did well to perfect the art of diamond-cutting, which has enabled me to polish and pierce the hardest stones!"

Master Zacharius was holding several small watch pieces of cut crystal, and of exquisite workmanship. The wheels, pivots, and case of the watch were of the same material, and he had employed remarkable skill in this very difficult task.

"Would it not be fine," said he, his face flushing, "to see this watch palpitating beneath its transparent envelope, and to be

able to count the beatings of its heart?"

"I will wager, sir," replied the young apprentice, "that it will not vary a second in a year."

"And you would wager on a certainty! Have I not imparted to it all that is purest of myself? And does my heart vary? My heart, I say?"

Aubert did not dare to lift his eyes to his master's face.

"Tell me frankly," said the old man sadly. "Have you never taken me for a madman? Do you not think me sometimes subject to dangerous folly? Yes; is it not so? In my daughter's eyes and yours, I have often read my condemnation. Oh!" he cried, as if in pain, "to be misunderstood by those whom one most loves in the world! But I will prove victoriously to thee, Aubert, that I am right! Do not shake thy head, for thou wilt be astounded. The day on which thou understandest how to listen to and comprehend me, thou wilt see that I have discovered the secrets of existence, the secrets of the mysterious union of the soul with the body!"

As he spoke thus, Master Zacharius appeared superb in his vanity. His eyes glittered with a supernatural fire, and his pride illumined every feature. And truly, if ever vanity was excusable, it was that of Master Zacharius!

The watchmaking art, indeed, down to his time, had remained almost in its infancy. From the day when Plato, four centuries before the Christian era, invented the night watch, a sort of clepsydra which indicated the hours of the night by the sound and playing of a flute, the science had continued nearly stationary. The masters paid more attention to the arts than to mechanics, and it was the period of beautiful watches of iron, copper, wood, silver, which were richly engraved, like one of Cellini's ewers. They made a masterpiece of chasing, which measured time imperfectly, but was still a masterpiece. When the artist's imagination was not directed to the perfection of modelling, it set to work to create clocks with moving figures and melodious sounds, whose appearance took all attention. Besides, who troubled himself, in those days, with regulating the advance of time? The delays of the law were not as yet invented; the physical and astronomical sciences had not as yet established their calculations on scrupulously exact measurements; there were neither establishments which were shut at a given hour, nor trains which departed at a precise moment. In the evening the curfew bell sounded; and at night the hours were cried amid the universal silence. Certainly people did not live so long, if existence is measured by the amount of business done; but they lived better. The mind was enriched with the noble sentiments born of the contemplation of chefs-d'oeuvré. They built a church in two centuries, a painter painted but few pictures in the

course of his life, a poet only composed one great work; but these were so many masterpieces for after-ages to appreciate.

When the exact sciences began at last to make some progress, watch and clock making followed in their path, though it was always arrested by an insurmountable difficulty,--the regular and continuous measurement of time.

It was in the midst of this stagnation that Master Zacharius invented the escapement, which enabled him to obtain a mathematical regularity by submitting the movement of the pendulum to a sustained force. This invention had turned the old man's head. Pride, swelling in his heart, like mercury in the thermometer, had attained the height of transcendent folly. By analogy he had allowed himself to be drawn to materialistic conclusions, and as he constructed his watches, he fancied that he had discovered the secrets of the union of the soul with the body.

Thus, on this day, perceiving that Aubert listened to him attentively, he said to him in a tone of simple conviction,--

"Dost thou know what life is, my child? Hast thou comprehended the action of those springs which produce existence? Hast thou examined thyself? No. And yet, with the eyes of science, thou mightest have seen the intimate relation which exists between God's work and my own; for it is from his creature that I have

copied the combinations of the wheels of my clocks."

"Master," replied Aubert eagerly, "can you compare a copper or steel machine with that breath of God which is called the soul, which animates our bodies as the breeze stirs the flowers? What mechanism could be so adjusted as to inspire us with thought?"

"That is not the question," responded Master Zacharius gently, but with all the obstinacy of a blind man walking towards an abyss. "In order to understand me, thou must recall the purpose of the escapement which I have invented. When I saw the irregular working of clocks, I understood that the movements shut up in them did not suffice, and that it was necessary to submit them to the regularity of some independent force. I then thought that the balance-wheel might accomplish this, and I succeeded in regulating the movement! Now, was it not a sublime idea that came to me, to return to it its lost force by the action of the clock itself, which it was charged with regulating?"

Aubert made a sign of assent.

"Now, Aubert," continued the old man, growing animated, "cast thine eyes upon thyself! Dost thou not understand that there are two distinct forces in us, that of the soul and that of the body--that is, a movement and a regulator? The soul is the principle of life; that is, then, the movement. Whether it is

produced by a weight, by a spring, or by an immaterial influence, it is none the less in the heart. But without the body this movement would be unequal, irregular, impossible! Thus the body regulates the soul, and, like the balance-wheel, it is submitted to regular oscillations. And this is so true, that one falls ill when one's drink, food, sleep--in a word, the functions of the body--are not properly regulated; just as in my watches the soul renders to the body the force lost by its oscillations. Well, what produces this intimate union between soul and body, if not a marvellous escapement, by which the wheels of the one work into the wheels of the other? This is what I have discovered and applied; and there are no longer any secrets for me in this life, which is, after all, only an ingenious mechanism!"

Master Zacharius looked sublime in this hallucination, which carried him to the ultimate mysteries of the Infinite. But his daughter Gerande, standing on the threshold of the door, had heard all. She rushed into her father's arms, and he pressed her convulsively to his breast.

"What is the matter with thee, my daughter?" he asked.

"If I had only a spring here," said she, putting her hand on her heart, "I would not love you as I do, father."

Master Zacharius looked intently at Gerande, and did not reply.

Suddenly he uttered a cry, carried his hand eagerly to his heart, and fell fainting on his old leathern chair.

"Father, what is the matter?"

"Help!" cried Aubert. "Scholastique!"

But Scholastique did not come at once. Some one was knocking at the front door; she had gone to open it, and when she returned to the shop, before she could open her mouth, the old watchmaker, having recovered his senses, spoke:--

"I divine, my old Scholastique, that you bring me still another of those accursed watches which have stopped."

"Lord, it is true enough!" replied Scholastique, handing a watch to Aubert.

"My heart could not be mistaken!" said the old man, with a sigh.

Meanwhile Aubert carefully wound up the watch, but it would not go.

CHAPTER III.

A STRANGE VISIT.

Poor Gerande would have lost her life with that of her father, had it not been for the thought of Aubert, who still attached her to the world.

The old watchmaker was, little by little, passing away. His faculties evidently grew more feeble, as he concentrated them on a single thought. By a sad association of ideas, he referred everything to his monomania, and a human existence seemed to have departed from him, to give place to the extra-natural existence of the intermediate powers. Moreover, certain malicious rivals revived the sinister rumours which had spread concerning his labours.

The news of the strange derangements which his watches betrayed had a prodigious effect upon the master clockmakers of Geneva. What signified this sudden paralysis of their wheels, and why these strange relations which they seemed to have with the old man's life? These were the kind of mysteries which people never contemplate without a secret terror. In the various classes of the town, from the apprentice to the great lord who used the watches of the old horologist, there was no one who could not

himself judge of the singularity of the fact. The citizens wished, but in vain, to get to see Master Zacharius. He fell very ill; and this enabled his daughter to withdraw him from those incessant visits which had degenerated into reproaches and recriminations.

Medicines and physicians were powerless in presence of this organic wasting away, the cause of which could not be discovered. It sometimes seemed as if the old man's heart had ceased to beat; then the pulsations were resumed with an alarming irregularity.

A custom existed in those days of publicly exhibiting the works of the masters. The heads of the various corporations sought to distinguish themselves by the novelty or the perfection of their productions; and it was among these that the condition of Master Zacharius excited the most lively, because most interested, commiseration. His rivals pitied him the more willingly because they feared him the less. They never forgot the old man's success, when he exhibited his magnificent clocks with moving figures, his repeaters, which provoked general admiration, and commanded such high prices in the cities of France, Switzerland, and Germany.

Meanwhile, thanks to the constant and tender care of Gerande and Aubert, his strength seemed to return a little; and in the tranquillity in which his convalescence left him, he succeeded in

detaching himself from the thoughts which had absorbed him. As soon as he could walk, his daughter lured him away from the house, which was still besieged with dissatisfied customers. Aubert remained in the shop, vainly adjusting and readjusting the rebel watches; and the poor boy, completely mystified, sometimes covered his face with his hands, fearful that he, like his master, might go mad.

Gerande led her father towards the more pleasant promenades of the town. With his arm resting on hers, she conducted him sometimes through the quarter of Saint Antoine, the view from which extends towards the Cologny hill, and over the lake; on fine mornings they caught sight of the gigantic peaks of Mount Buet against the horizon. Gerande pointed out these spots to her father, who had well-nigh forgotten even their names. His memory wandered; and he took a childish interest in learning anew what had passed from his mind. Master Zacharius leaned upon his daughter; and the two heads, one white as snow and the other covered with rich golden tresses, met in the same ray of sunlight.

So it came about that the old watchmaker at last perceived that he was not alone in the world. As he looked upon his young and lovely daughter, and on himself old and broken, he reflected that after his death she would be left alone without support. Many of the young mechanics of Geneva had already sought to win Gerande's

love; but none of them had succeeded in gaining access to the impenetrable retreat of the watchmaker's household. It was natural, then, that during this lucid interval, the old man's choice should fall on Aubert Thun. Once struck with this thought, he remarked to himself that this young couple had been brought up with the same ideas and the same beliefs; and the oscillations of their hearts seemed to him, as he said one day to Scholastique, "isochronous."

The old servant, literally delighted with the word, though she did not understand it, swore by her holy patron saint that the whole town should hear it within a quarter of an hour. Master Zacharius found it difficult to calm her; but made her promise to keep on this subject a silence which she never was known to observe.

So, though Gerande and Aubert were ignorant of it, all Geneva was soon talking of their speedy union. But it happened also that, while the worthy folk were gossiping, a strange chuckle was often heard, and a voice saying, "Gerande will not wed Aubert."

If the talkers turned round, they found themselves facing a little old man who was quite a stranger to them.

How old was this singular being? No one could have told. People conjectured that he must have existed for several centuries, and

that was all. His big flat head rested upon shoulders the width of which was equal to the height of his body; this was not above three feet. This personage would have made a good figure to support a pendulum, for the dial would have naturally been placed on his face, and the balance-wheel would have oscillated at its ease in his chest. His nose might readily have been taken for the style of a sun-dial, for it was narrow and sharp; his teeth, far apart, resembled the cogs of a wheel, and ground themselves between his lips; his voice had the metallic sound of a bell, and you could hear his heart beat like the tick of a clock. This little man, whose arms moved like the hands on a dial, walked with jerks, without ever turning round. If any one followed him, it was found that he walked a league an hour, and that his course was nearly circular.

This strange being had not long been seen wandering, or rather circulating, around the town; but it had already been observed that, every day, at the moment when the sun passed the meridian, he stopped before the Cathedral of Saint Pierre, and resumed his course after the twelve strokes of noon had sounded. Excepting at this precise moment, he seemed to become a part of all the conversations in which the old watchmaker was talked of; and people asked each other, in terror, what relation could exist between him and Master Zacharius. It was remarked, too, that he never lost sight of the old man and his daughter while they were taking their promenades.

One day Gerande perceived this monster looking at her with a hideous smile. She clung to her father with a frightened motion.

"What is the matter, my Gerande?" asked Master Zacharius.

"I do not know," replied the young girl.

"But thou art changed, my child. Art thou going to fall ill in thy turn? Ah, well," he added, with a sad smile, "then I must take care of thee, and I will do it tenderly."

"O father, it will be nothing. I am cold, and I imagine that it is--"

"What, Gerande?"

"The presence of that man, who always follows us," she replied in a low tone.

Master Zacharius turned towards the little old man.

"Faith, he goes well," said he, with a satisfied air, "for it is just four o'clock. Fear nothing, my child; it is not a man, it is a clock!"

Gerande looked at her father in terror. How could Master Zacharius read the hour on this strange creature's visage?

"By-the-bye," continued the old watchmaker, paying no further attention to the matter, "I have not seen Aubert for several days."

"He has not left us, however, father," said Gerande, whose thoughts turned into a gentler channel.

"What is he doing then?"

"He is working."

"Ah!" cried the old man. "He is at work repairing my watches, is he not? But he will never succeed; for it is not repair they need, but a resurrection!"

Gerande remained silent.

"I must know," added the old man, "if they have brought back any more of those accursed watches upon which the Devil has sent this epidemic!"

After these words Master Zacharius fell into complete silence, till he knocked at the door of his house, and for the first time

since his convalescence descended to his shop, while Gerande sadly repaired to her chamber.

Just as Master Zacharius crossed the threshold of his shop, one of the many clocks suspended on the wall struck five o'clock. Usually the bells of these clocks--admirably regulated as they were--struck simultaneously, and this rejoiced the old man's heart; but on this day the bells struck one after another, so that for a quarter of an hour the ear was deafened by the successive noises. Master Zacharius suffered acutely; he could not remain still, but went from one clock to the other, and beat the time to them, like a conductor who no longer has control over his musicians.

When the last had ceased striking, the door of the shop opened, and Master Zacharius shuddered from head to foot to see before him the little old man, who looked fixedly at him and said,--

"Master, may I not speak with you a few moments?"

"Who are you?" asked the watchmaker abruptly.

"A colleague. It is my business to regulate the sun."

"Ah, you regulate the sun?" replied Master Zacharius eagerly, without wincing. "I can scarcely compliment you upon it. Your sun

goes badly, and in order to make ourselves agree with it, we have to keep putting our clocks forward so much or back so much."

"And by the cloven foot," cried this weird personage, "you are right, my master! My sun does not always mark noon at the same moment as your clocks; but some day it will be known that this is because of the inequality of the earth's transfer, and a mean noon will be invented which will regulate this irregularity!"

"Shall I live till then?" asked the old man, with glistening eyes.

"Without doubt," replied the little old man, laughing. "Can you believe that you will ever die?"

"Alas! I am very ill now."

"Ah, let us talk of that. By Beelzebub! that will lead to just what I wish to speak to you about."

Saying this, the strange being leaped upon the old leather chair, and carried his legs one under the other, after the fashion of the bones which the painters of funeral hangings cross beneath death's heads. Then he resumed, in an ironical tone,--

"Let us see, Master Zacharius, what is going on in this good town

of Geneva? They say that your health is failing, that your watches have need of a doctor!"

"Ah, do you believe that there is an intimate relation between their existence and mine?" cried Master Zacharius.

"Why, I imagine that these watches have faults, even vices. If these wantons do not preserve a regular conduct, it is right that they should bear the consequences of their irregularity. It seems to me that they have need of reforming a little!"

"What do you call faults?" asked Master Zacharius, reddening at the sarcastic tone in which these words were uttered. "Have they not a right to be proud of their origin?"

"Not too proud, not too proud," replied the little old man. "They bear a celebrated name, and an illustrious signature is graven on their cases, it is true, and theirs is the exclusive privilege of being introduced among the noblest families; but for some time they have got out of order, and you can do nothing in the matter, Master Zacharius; and the stupidest apprentice in Geneva could prove it to you!"

"To me, to me,--Master Zacharius!" cried the old man, with a flush of outraged pride.

"To you, Master Zacharius,--you, who cannot restore life to your watches!"

"But it is because I have a fever, and so have they also!" replied the old man, as a cold sweat broke out upon him.

"Very well, they will die with you, since you cannot impart a little elasticity to their springs."

"Die! No, for you yourself have said it! I cannot die,--I, the first watchmaker in the world; I, who, by means of these pieces and diverse wheels, have been able to regulate the movement with absolute precision! Have I not subjected time to exact laws, and can I not dispose of it like a despot? Before a sublime genius had arranged these wandering hours regularly, in what vast uncertainty was human destiny plunged? At what certain moment could the acts of life be connected with each other? But you, man or devil, whatever you may be, have never considered the magnificence of my art, which calls every science to its aid! No, no! I, Master Zacharius, cannot die, for, as I have regulated time, time would end with me! It would return to the infinite, whence my genius has rescued it, and it would lose itself irreparably in the abyss of nothingness! No, I can no more die than the Creator of this universe, that submitted to His laws! I have become His equal, and I have partaken of His power! If God has created eternity, Master Zacharius has created time!"

The old watchmaker now resembled the fallen angel, defiant in the presence of the Creator. The little old man gazed at him, and even seemed to breathe into him this impious transport.

"Well said, master," he replied. "Beelzebub had less right than you to compare himself with God! Your glory must not perish! So your servant here desires to give you the method of controlling these rebellious watches."

"What is it? what is it?" cried Master Zacharius.

"You shall know on the day after that on which you have given me your daughter's hand."

"My Gerande?"

"Herself!"

"My daughter's heart is not free," replied Master Zacharius, who seemed neither astonished nor shocked at the strange demand.

"Bah! She is not the least beautiful of watches; but she will end by stopping also--"

"My daughter,--my Gerande! No!"

"Well, return to your watches, Master Zacharius. Adjust and readjust them. Get ready the marriage of your daughter and your apprentice. Temper your springs with your best steel. Bless Aubert and the pretty Gerande. But remember, your watches will never go, and Gerande will not wed Aubert!"

Thereupon the little old man disappeared, but not so quickly that Master Zacharius could not hear six o'clock strike in his breast.

CHAPTER IV.

THE CHURCH OF SAINT PIERRE.

Meanwhile Master Zacharius became more feeble in mind and body every day. An unusual excitement, indeed, impelled him to continue his work more eagerly than ever, nor could his daughter entice him from it.

His pride was still more aroused after the crisis to which his strange visitor had hurried him so treacherously, and he resolved to overcome, by the force of genius, the malign influence which weighed upon his work and himself. He first repaired to the various clocks of the town which were confided to his care. He made sure, by a scrupulous examination, that the wheels were in good condition, the pivots firm, the weights exactly balanced. Every part, even to the bells, was examined with the minute attention of a physician studying the breast of a patient. Nothing indicated that these clocks were on the point of being affected by inactivity.

Gerande and Aubert often accompanied the old man on these visits. He would no doubt have been pleased to see them eager to go with him, and certainly he would not have been so much absorbed in his approaching end, had he thought that his existence was to be

prolonged by that of these cherished ones, and had he understood that something of the life of a father always remains in his children.

The old watchmaker, on returning home, resumed his labours with feverish zeal. Though persuaded that he would not succeed, it yet seemed to him impossible that this could be so, and he unceasingly took to pieces the watches which were brought to his shop, and put them together again.

Aubert tortured his mind in vain to discover the causes of the evil.

"Master," said he, "this can only come from the wear of the pivots and gearing."

"Do you want, then, to kill me, little by little?" replied Master Zacharius passionately. "Are these watches child's work? Was it lest I should hurt my fingers that I worked the surface of these copper pieces in the lathe? Have I not forged these pieces of copper myself, so as to obtain a greater strength? Are not these springs tempered to a rare perfection? Could anybody have used finer oils than mine? You must yourself agree that it is impossible, and you avow, in short, that the devil is in it!"

From morning till night discontented purchasers besieged the

house, and they got access to the old watchmaker himself, who knew not which of them to listen to.

"This watch loses, and I cannot succeed in regulating it," said one.

"This," said another, "is absolutely obstinate, and stands still, as did Joshua's sun."

"If it is true," said most of them, "that your health has an influence on that of your watches, Master Zacharius, get well as soon as possible."

The old man gazed at these people with haggard eyes, and only replied by shaking his head, or by a few sad words,--

"Wait till the first fine weather, my friends. The season is coming which revives existence in wearied bodies. We want the sun to warm us all!"

"A fine thing, if my watches are to be ill through the winter!" said one of the most angry. "Do you know, Master Zacharius, that your name is inscribed in full on their faces? By the Virgin, you do little honour to your signature!"

It happened at last that the old man, abashed by these

reproaches, took some pieces of gold from his old trunk, and began to buy back the damaged watches. At news of this, the customers came in a crowd, and the poor watchmaker's money fast melted away; but his honesty remained intact. Gerande warmly praised his delicacy, which was leading him straight towards ruin; and Aubert soon offered his own savings to his master.

"What will become of my daughter?" said Master Zacharius, clinging now and then in the shipwreck to his paternal love.

Aubert dared not answer that he was full of hope for the future, and of deep devotion to Gerande. Master Zacharius would have that day called him his son-in-law, and thus refuted the sad prophecy, which still buzzed in his ears,--

"Gerande will not wed Aubert."

By this plan the watchmaker at last succeeded in entirely despoiling himself. His antique vases passed into the hands of strangers; he deprived himself of the richly-carved panels which adorned the walls of his house; some primitive pictures of the early Flemish painters soon ceased to please his daughter's eyes, and everything, even the precious tools that his genius had invented, were sold to indemnify the clamorous customers.

Scholastique alone refused to listen to reason on the subject;

but her efforts failed to prevent the unwelcome visitors from reaching her master, and from soon departing with some valuable object. Then her chattering was heard in all the streets of the neighbourhood, where she had long been known. She eagerly denied the rumours of sorcery and magic on the part of Master Zacharius, which gained currency; but as at bottom she was persuaded of their truth, she said her prayers over and over again to redeem her pious falsehoods.

It had been noticed that for some time the old watchmaker had neglected his religious duties. Time was, when he had accompanied Gerande to church, and had seemed to find in prayer the intellectual charm which it imparts to thoughtful minds, since it is the most sublime exercise of the imagination. This voluntary neglect of holy practices, added to the secret habits of his life, had in some sort confirmed the accusations levelled against his labours. So, with the double purpose of drawing her father back to God, and to the world, Gerande resolved to call religion to her aid. She thought that it might give some vitality to his dying soul; but the dogmas of faith and humility had to combat, in the soul of Master Zacharius, an insurmountable pride, and came into collision with that vanity of science which connects everything with itself, without rising to the infinite source whence first principles flow.

It was under these circumstances that the young girl undertook

her father's conversion; and her influence was so effective that the old watchmaker promised to attend high mass at the cathedral on the following Sunday. Gerande was in an ecstasy, as if heaven had opened to her view. Old Scholastique could not contain her joy, and at last found irrefutable arguments' against the gossiping tongues which accused her master of impiety. She spoke of it to her neighbours, her friends, her enemies, to those whom she knew not as well as to those whom she knew.

"In faith, we scarcely believe what you tell us, dame Scholastique," they replied; "Master Zacharius has always acted in concert with the devil!"

"You haven't counted, then," replied the old servant, "the fine bells which strike for my master's clocks? How many times they have struck the hours of prayer and the mass!"

"No doubt," they would reply. "But has he not invented machines which go all by themselves, and which actually do the work of a real man?"

"Could a child of the devil," exclaimed dame Scholastique wrathfully, "have executed the fine iron clock of the château of Andernatt, which the town of Geneva was not rich enough to buy? A pious motto appeared at each hour, and a Christian who obeyed them, would have gone straight to Paradise! Is that the work of

the devil?"

This masterpiece, made twenty years before, had carried Master Zacharius's fame to its acme; but even then there had been accusations of sorcery against him. But at least the old man's visit to the Cathedral ought to reduce malicious tongues to silence.

Master Zacharius, having doubtless forgotten the promise made to his daughter, had returned to his shop. After being convinced of his powerlessness to give life to his watches, he resolved to try if he could not make some new ones. He abandoned all those useless works, and devoted himself to the completion of the crystal watch, which he intended to be his masterpiece; but in vain did he use his most perfect tools, and employ rubies and diamonds for resisting friction. The watch fell from his hands the first time that he attempted to wind it up!

The old man concealed this circumstance from every one, even from his daughter; but from that time his health rapidly declined. There were only the last oscillations of a pendulum, which goes slower when nothing restores its original force. It seemed as if the laws of gravity, acting directly upon him, were dragging him irresistibly down to the grave.

The Sunday so ardently anticipated by Gerande at last arrived.

The weather was fine, and the temperature inspiriting. The people of Geneva were passing quietly through the streets, gaily chatting about the return of spring. Gerande, tenderly taking the old man's arm, directed her steps towards the cathedral, while Scholastique followed behind with the prayer-books. People looked curiously at them as they passed. The old watchmaker permitted himself to be led like a child, or rather like a blind man. The faithful of Saint Pierre were almost frightened when they saw him cross the threshold, and shrank back at his approach.

The chants of high mass were already resounding through the church. Gerande went to her accustomed bench, and kneeled with profound and simple reverence. Master Zacharius remained standing upright beside her.

The ceremonies continued with the majestic solemnity of that faithful age, but the old man had no faith. He did not implore the pity of Heaven with cries of anguish of the "Kyrie;" he did not, with the "Gloria in Excelsis," sing the splendours of the heavenly heights; the reading of the Testament did not draw him from his materialistic reverie, and he forgot to join in the homage of the "Credo." This proud old man remained motionless, as insensible and silent as a stone statue; and even at the solemn moment when the bell announced the miracle of transubstantiation, he did not bow his head, but gazed directly at the sacred host which the priest raised above the heads of the faithful. Gerande

looked at her father, and a flood of tears moistened her missal. At this moment the clock of Saint Pierre struck half-past eleven. Master Zacharius turned quickly towards this ancient clock which still spoke. It seemed to him as if its face was gazing steadily at him; the figures of the hours shone as if they had been engraved in lines of fire, and the hands shot forth electric sparks from their sharp points.

The mass ended. It was customary for the "Angelus" to be said at noon, and the priests, before leaving the altar, waited for the clock to strike the hour of twelve. In a few moments this prayer would ascend to the feet of the Virgin.

But suddenly a harsh noise was heard. Master Zacharius uttered a piercing cry.

The large hand of the clock, having reached twelve, had abruptly stopped, and the clock did not strike the hour.

Gerande hastened to her father's aid. He had fallen down motionless, and they carried him outside the church.

"It is the death-blow!" murmured Gerande, sobbing.

When he had been borne home, Master Zacharius lay upon his bed utterly crushed. Life seemed only to still exist on the surface

of his body, like the last whiffs of smoke about a lamp just extinguished. When he came to his senses, Aubert and Gerande were leaning over him. In these last moments the future took in his eyes the shape of the present. He saw his daughter alone, without a protector.

"My son," said he to Aubert, "I give my daughter to thee."

So saying, he stretched out his hands towards his two children, who were thus united at his death-bed.

But soon Master Zacharius lifted himself up in a paroxysm of rage. The words of the little old man recurred to his mind.

"I do not wish to die!" he cried; "I cannot die! I, Master Zacharius, ought not to die! My books--my accounts!--"

With these words he sprang from his bed towards a book in which the names of his customers and the articles which had been sold to them were inscribed. He seized it and rapidly turned over its leaves, and his emaciated finger fixed itself on one of the pages.

"There!" he cried, "there! this old iron clock, sold to Pittonaccio! It is the only one that has not been returned to me! It still exists--it goes--it lives! Ah, I wish for it--I must

find it! I will take such care of it that death will no longer seek me!"

And he fainted away.

Aubert and Gerande knelt by the old man's bed-side and prayed together.

CHAPTER V.

THE HOUR OF DEATH.

Several days passed, and Master Zacharius, though almost dead, rose from his bed and returned to active life under a supernatural excitement. He lived by pride. But Gerande did not deceive herself; her father's body and soul were for ever lost.

The old man got together his last remaining resources, without thought of those who were dependent upon him. He betrayed an incredible energy, walking, ferreting about, and mumbling strange, incomprehensible words.

One morning Gerande went down to his shop. Master Zacharius was not there. She waited for him all day. Master Zacharius did not return.

Gerande wept bitterly, but her father did not reappear.

Aubert searched everywhere through the town, and soon came to the sad conviction that the old man had left it.

"Let us find my father!" cried Gerande, when the young apprentice told her this sad news.

"Where can he be?" Aubert asked himself.

An inspiration suddenly came to his mind. He remembered the last words which Master Zacharius had spoken. The old man only lived now in the old iron clock that had not been returned! Master Zacharius must have gone in search of it.

Aubert spoke of this to Gerande.

"Let us look at my father's book," she replied.

They descended to the shop. The book was open on the bench. All the watches or clocks made by the old man, and which had been returned to him because they were out of order, were stricken out excepting one:--

"Sold to M. Pittonaccio, an iron clock, with bell and moving figures; sent to his château at Andernatt."

It was this "moral" clock of which Scholastique had spoken with so much enthusiasm.

"My father is there!" cried Gerande.

"Let us hasten thither," replied Aubert. "We may still save him!"

"Not for this life," murmured Gerande, "but at least for the other."

"By the mercy of God, Gerande! The château of Andernatt stands in the gorge of the 'Dents-du-Midi' twenty hours from Geneva. Let us go!"

That very evening Aubert and Gerande, followed by the old servant, set out on foot by the road which skirts Lake Leman. They accomplished five leagues during the night, stopping neither at Bessinge nor at Ermance, where rises the famous château of the Mayors. They with difficulty forded the torrent of the Dranse, and everywhere they went they inquired for Master Zacharius, and were soon convinced that they were on his track.

The next morning, at daybreak, having passed Thonon, they reached Evian, whence the Swiss territory may be seen extended over twelve leagues. But the two betrothed did not even perceive the enchanting prospect. They went straight forward, urged on by a supernatural force. Aubert, leaning on a knotty stick, offered his arm alternately to Gerande and to Scholastique, and he made the greatest efforts to sustain his companions. All three talked of their sorrow, of their hopes, and thus passed along the beautiful road by the water-side, and across the narrow plateau which unites the borders of the lake with the heights of the

Chalais. They soon reached Bouveret, where the Rhone enters the Lake of Geneva.

On leaving this town they diverged from the lake, and their weariness increased amid these mountain districts. Vionnaz, Chesset, Collombay, half lost villages, were soon left behind. Meanwhile their knees shook, their feet were lacerated by the sharp points which covered the ground like a brushwood of granite;--but no trace of Master Zacharius!

He must be found, however, and the two young people did not seek repose either in the isolated hamlets or at the château of Monthay, which, with its dependencies, formed the appanage of Margaret of Savoy. At last, late in the day, and half dead with fatigue, they reached the hermitage of Notre-Dame-du-Sex, which is situated at the base of the Dents-du-Midi, six hundred feet above the Rhone.

The hermit received the three wanderers as night was falling. They could not have gone another step, and here they must needs rest.

The hermit could give them no news of Master Zacharius. They could scarcely hope to find him still living amid these sad solitudes. The night was dark, the wind howled amid the mountains, and the avalanches roared down from the summits of the

broken crags.

Aubert and Gerande, crouching before the hermit's hearth, told him their melancholy tale. Their mantles, covered with snow, were drying in a corner; and without, the hermit's dog barked lugubriously, and mingled his voice with that of the tempest.

"Pride," said the hermit to his guests, "has destroyed an angel created for good. It is the stumbling-block against which the destinies of man strike. You cannot reason with pride, the principal of all the vices, since, by its very nature, the proud man refuses to listen to it. It only remains, then, to pray for your father!"

All four knelt down, when the barking of the dog redoubled, and some one knocked at the door of the hermitage.

"Open, in the devil's name!"

The door yielded under the blows, and a dishevelled, haggard, ill-clothed man appeared.

"My father!" cried Gerande.

It was Master Zacharius.

"Where am I?" said he. "In eternity! Time is ended--the hours no longer strike--the hands have stopped!"

"Father!" returned Gerande, with so piteous an emotion that the old man seemed to return to the world of the living.

"Thou here, Gerande?" he cried; "and thou, Aubert? Ah, my dear betrothed ones, you are going to be married in our old church!"

"Father," said Gerande, seizing him by the arm, "come home to Geneva,--come with us!"

The old man tore away from his daughter's embrace and hurried towards the door, on the threshold of which the snow was falling in large flakes.

"Do not abandon your children!" cried Aubert.

"Why return," replied the old man sadly, "to those places which my life has already quitted, and where a part of myself is for ever buried?"

"Your soul is not dead," said the hermit solemnly.

"My soul? O no,--its wheels are good! I perceive it beating regularly--"

"Your soul is immaterial,--your soul is immortal!" replied the hermit sternly.

"Yes--like my glory! But it is shut up in the château of Andernatt, and I wish to see it again!"

The hermit crossed himself; Scholastique became almost inanimate. Aubert held Gerande in his arms.

"The château of Andernatt is inhabited by one who is lost," said the hermit, "one who does not salute the cross of my hermitage."

"My father, go not thither!"

"I want my soul! My soul is mine--"

"Hold him! Hold my father!" cried Gerande.

But the old man had leaped across the threshold, and plunged into the night, crying, "Mine, mine, my soul!"

Gerande, Aubert, and Scholastique hastened after him. They went by difficult paths, across which Master Zacharius sped like a tempest, urged by an irresistible force. The snow raged around them, and mingled its white flakes with the froth of the swollen

torrents.

As they passed the chapel erected in memory of the massacre of the Theban legion, they hurriedly crossed themselves. Master Zacharius was not to be seen.

At last the village of Evionnaz appeared in the midst of this sterile region. The hardest heart would have been moved to see this hamlet, lost among these horrible solitudes. The old man sped on, and plunged into the deepest gorge of the Dents-du-Midi, which pierce the sky with their sharp peaks.

Soon a ruin, old and gloomy as the rocks at its base, rose before him.

"It is there--there!" he cried, hastening his pace still more frantically.

The château of Andernatt was a ruin even then. A thick, crumbling tower rose above it, and seemed to menace with its downfall the old gables which reared themselves below. The vast piles of jagged stones were gloomy to look on. Several dark halls appeared amid the debris, with caved-in ceilings, now become the abode of vipers.

A low and narrow postern, opening upon a ditch choked with

rubbish, gave access to the château. Who had dwelt there none knew. No doubt some margrave, half lord, half brigand, had sojourned in it; to the margrave had succeeded bandits or counterfeit coiners, who had been hanged on the scene of their crime. The legend went that, on winter nights, Satan came to lead his diabolical dances on the slope of the deep gorges in which the shadow of these ruins was engulfed.

But Master Zacharius was not dismayed by their sinister aspect. He reached the postern. No one forbade him to pass. A spacious and gloomy court presented itself to his eyes; no one forbade him to cross it. He passed along the kind of inclined plane which conducted to one of the long corridors, whose arches seemed to banish daylight from beneath their heavy springings. His advance was unresisted. Gerande, Aubert, and Scholastique closely followed him.

Master Zacharius, as if guided by an irresistible hand, seemed sure of his way, and strode along with rapid step. He reached an old worm-eaten door, which fell before his blows, whilst the bats described oblique circles around his head.

An immense hall, better preserved than the rest, was soon reached. High sculptured panels, on which serpents, ghouls, and other strange figures seemed to disport themselves confusedly, covered its walls. Several long and narrow windows, like

loopholes, shivered beneath the bursts of the tempest.

Master Zacharius, on reaching the middle of this hall, uttered a cry of joy.

On an iron support, fastened to the wall, stood the clock in which now resided his entire life. This unequalled masterpiece represented an ancient Roman church, with buttresses of wrought iron, with its heavy bell-tower, where there was a complete chime for the anthem of the day, the "Angelus," the mass, vespers, compline, and the benediction. Above the church door, which opened at the hour of the services, was placed a "rose," in the centre of which two hands moved, and the archivault of which reproduced the twelve hours of the face sculptured in relief. Between the door and the rose, just as Scholastique had said, a maxim, relative to the employment of every moment of the day, appeared on a copper plate. Master Zacharius had once regulated this succession of devices with a really Christian solicitude; the hours of prayer, of work, of repast, of recreation, and of repose, followed each other according to the religious discipline, and were to infallibly insure salvation to him who scrupulously observed their commands.

Master Zacharius, intoxicated with joy, went forward to take possession of the clock, when a frightful roar of laughter resounded behind him.

He turned, and by the light of a smoky lamp recognized the little old man of Geneva.

"You here?" cried he.

Gerande was afraid. She drew closer to Aubert.

"Good-day, Master Zacharius," said the monster.

"Who are you?"

"Signor Pittonaccio, at your service! You have come to give me your daughter! You have remembered my words, 'Gerande will not wed Aubert.'"

The young apprentice rushed upon Pittonaccio, who escaped from him like a shadow.

"Stop, Aubert!" cried Master Zacharius.

"Good-night," said Pittonaccio, and he disappeared.

"My father, let us fly from this hateful place!" cried Gerande.
"My father!"

Master Zacharius was no longer there. He was pursuing the phantom of Pittonaccio across the rickety corridors. Scholastique, Gerande, and Aubert remained, speechless and fainting, in the large gloomy hall. The young girl had fallen upon a stone seat; the old servant knelt beside her, and prayed; Aubert remained erect, watching his betrothed. Pale lights wandered in the darkness, and the silence was only broken by the movements of the little animals which live in old wood, and the noise of which marks the hours of "death watch."

When daylight came, they ventured upon the endless staircase which wound beneath these ruined masses; for two hours they wandered thus without meeting a living soul, and hearing only a far-off echo responding to their cries. Sometimes they found themselves buried a hundred feet below the ground, and sometimes they reached places whence they could overlook the wild mountains.

Chance brought them at last back again to the vast hall, which had sheltered them during this night of anguish. It was no longer empty. Master Zacharius and Pittonaccio were talking there together, the one upright and rigid as a corpse, the other crouching over a marble table.

Master Zacharius, when he perceived Gerande, went forward and took her by the hand, and led her towards Pittonaccio, saying,

"Behold your lord and master, my daughter. Gerande, behold your husband!"

Gerande shuddered from head to foot.

"Never!" cried Aubert, "for she is my betrothed."

"Never!" responded Gerande, like a plaintive echo.

Pittonaccio began to laugh.

"You wish me to die, then!" exclaimed the old man. "There, in that clock, the last which goes of all which have gone from my hands, my life is shut up; and this man tells me, 'When I have thy daughter, this clock shall belong to thee.' And this man will not rewind it. He can break it, and plunge me into chaos. Ah, my daughter, you no longer love me!"

"My father!" murmured Gerande, recovering consciousness.

"If you knew what I have suffered, far away from this principle of my existence!" resumed the old man. "Perhaps no one looked after this timepiece. Perhaps its springs were left to wear out, its wheels to get clogged. But now, in my own hands, I can nourish this health so dear, for I must not die,--I, the great watchmaker of Geneva. Look, my daughter, how these hands advance

with certain step. See, five o'clock is about to strike. Listen well, and look at the maxim which is about to be revealed."

Five o'clock struck with a noise which resounded sadly in Gerande's soul, and these words appeared in red letters:

"YOU MUST EAT OF THE FRUITS OF THE TREE OF SCIENCE."

Aubert and Gerande looked at each other stupefied. These were no longer the pious sayings of the Catholic watchmaker. The breath of Satan must have passed over it. But Zacharius paid no attention to this, and resumed--

"Dost thou hear, my Gerande? I live, I still live! Listen to my breathing,--see the blood circulating in my veins! No, thou wouldst not kill thy father, and thou wilt accept this man for thy husband, so that I may become immortal, and at last attain the power of God!"

At these blasphemous words old Scholastique crossed herself, and Pittonaccio laughed aloud with joy.

"And then, Gerande, thou wilt be happy with him. See this man,--he is Time! Thy existence will be regulated with absolute precision. Gerande, since I gave thee life, give life to thy father!"

"Gerande," murmured Aubert, "I am thy betrothed."

"He is my father!" replied Gerande, fainting.

"She is thine!" said Master Zacharius. "Pittonaccio, them wilt keep thy promise!"

"Here is the key of the clock," replied the horrible man.

Master Zacharius seized the long key, which resembled an uncoiled snake, and ran to the clock, which he hastened to wind up with fantastic rapidity. The creaking of the spring jarred upon the nerves. The old watchmaker wound and wound the key, without stopping a moment, and it seemed as if the movement were beyond his control. He wound more and more quickly, with strange contortions, until he fell from sheer weariness.

"There, it is wound up for a century!" he cried.

Aubert rushed from the hall as if he were mad. After long wandering, he found the outlet of the hateful château, and hastened into the open air. He returned to the hermitage of Notre-Dame-du-Sex, and talked so despairingly to the holy recluse, that the latter consented to return with him to the château of Andernatt.

If, during these hours of anguish, Gerande had not wept, it was because her tears were exhausted.

Master Zacharius had not left the hall. He ran every moment to listen to the regular beating of the old clock.

Meanwhile the clock had struck, and to Scholastique's great terror, these words had appeared on the silver face:--"MAN OUGHT TO BECOME THE EQUAL OF GOD."

The old man had not only not been shocked by these impious maxims, but read them deliriously, and flattered himself with thoughts of pride, whilst Pittonaccio kept close by him.

The marriage-contract was to be signed at midnight. Gerande, almost unconscious, saw or heard nothing. The silence was only broken by the old man's words, and the chuckling of Pittonaccio.

Eleven o'clock struck. Master Zacharius shuddered, and read in a loud voice:--

"MAN SHOULD BE THE SLAVE OF SCIENCE, AND
SACRIFICE TO IT RELATIVES AND FAMILY."

"Yes!" he cried, "there is nothing but science in this world!"

The hands slipped over the face of the clock with the hiss of a serpent, and the pendulum beat with accelerated strokes.

Master Zacharius no longer spoke. He had fallen to the floor, his throat rattled, and from his oppressed bosom came only these half-broken words: "Life--science!"

The scene had now two new witnesses, the hermit and Aubert. Master Zacharius lay upon the floor; Gerande was praying beside him, more dead than alive.

Of a sudden a dry, hard noise was heard, which preceded the strike.

Master Zacharius sprang up.

"Midnight!" he cried.

The hermit stretched out his hand towards the old clock,--and midnight did not sound.

Master Zacharius uttered a terrible cry, which must have been heard in hell, when these words appeared:--

"WHO EVER SHALL ATTEMPT TO MAKE HIMSELF THE EQUAL OF GOD, SHALL

BE FOR EVER DAMNED!"

The old clock burst with a noise like thunder, and the spring, escaping, leaped across the hall with a thousand fantastic contortions; the old man rose, ran after it, trying in vain to seize it, and exclaiming, "My soul,--my soul!"

The spring bounded before him, first on one side, then on the other, and he could not reach it.

At last Pittonaccio seized it, and, uttering a horrible blasphemy, ingulfed himself in the earth.

Master Zacharius fell backwards. He was dead.

The old watchmaker was buried in the midst of the peaks of Andernatt.

Then Aubert and Gerande returned to Geneva, and during the long life which God accorded to them, they made it a duty to redeem by prayer the soul of the castaway of science.

A DRAMA IN THE AIR.

In the month of September, 185--, I arrived at Frankfort-on-the-Maine. My passage through the principal German cities had been brilliantly marked by balloon ascents; but as yet no German had accompanied me in my car, and the fine experiments made at Paris by MM. Green, Eugene Godard, and Poitevin had not tempted the grave Teutons to essay aerial voyages.

But scarcely had the news of my approaching ascent spread through Frankfort, than three of the principal citizens begged the favour of being allowed to ascend with me. Two days afterwards we were to start from the Place de la Comédie. I began at once to get my balloon ready. It was of silk, prepared with gutta percha, a substance impermeable by acids or gasses; and its volume, which was three thousand cubic yards, enabled it to ascend to the loftiest heights.

The day of the ascent was that of the great September fair, which attracts so many people to Frankfort. Lighting gas, of a perfect quality and of great lifting power, had been furnished to me in excellent condition, and about eleven o'clock the balloon was filled; but only three-quarters filled,--an indispensable precaution, for, as one rises, the atmosphere diminishes in

density, and the fluid enclosed within the balloon, acquiring more elasticity, might burst its sides. My calculations had furnished me with exactly the quantity of gas necessary to carry up my companions and myself.

We were to start at noon. The impatient crowd which pressed around the enclosed space, filling the enclosed square, overflowing into the contiguous streets, and covering the houses from the ground-floor to the slated gables, presented a striking scene. The high winds of the preceding days had subsided. An oppressive heat fell from the cloudless sky. Scarcely a breath animated the atmosphere. In such weather, one might descend again upon the very spot whence he had risen.

I carried three hundred pounds of ballast in bags; the car, quite round, four feet in diameter, was comfortably arranged; the hempen cords which supported it stretched symmetrically over the upper hemisphere of the balloon; the compass was in place, the barometer suspended in the circle which united the supporting cords, and the anchor carefully put in order. All was now ready for the ascent.

Among those who pressed around the enclosure, I remarked a young man with a pale face and agitated features. The sight of him impressed me. He was an eager spectator of my ascents, whom I had already met in several German cities. With an uneasy air, he

closely watched the curious machine, as it lay motionless a few feet above the ground; and he remained silent among those about him.

Twelve o'clock came. The moment had arrived, but my travelling companions did not appear.

I sent to their houses, and learnt that one had left for Hamburg, another for Vienna, and the third for London. Their courage had failed them at the moment of undertaking one of those excursions which, thanks to the ability of living aeronauts, are free from all danger. As they formed, in some sort, a part of the programme of the day, the fear had seized them that they might be forced to execute it faithfully, and they had fled far from the scene at the instant when the balloon was being filled. Their courage was evidently the inverse ratio of their speed--in decamping.

The multitude, half deceived, showed not a little ill-humour. I did not hesitate to ascend alone. In order to re-establish the equilibrium between the specific gravity of the balloon and the weight which had thus proved wanting, I replaced my companions by more sacks of sand, and got into the car. The twelve men who held the balloon by twelve cords fastened to the equatorial circle, let them slip a little between their fingers, and the balloon rose several feet higher. There was not a breath of wind, and the atmosphere was so leaden that it seemed to forbid the ascent.

"Is everything ready?" I cried.

The men put themselves in readiness. A last glance told me that I might go.

"Attention!"

There was a movement in the crowd, which seemed to be invading the enclosure.

"Let go!"

The balloon rose slowly, but I experienced a shock which threw me to the bottom of the car.

When I got up, I found myself face to face with an unexpected fellow-voyager,--the pale young man.

"Monsieur, I salute you," said he, with the utmost coolness.

"By what right--"

"Am I here? By the right which the impossibility of your getting rid of me confers."

I was amazed! His calmness put me out of countenance, and I had nothing to reply. I looked at the intruder, but he took no notice of my astonishment.

"Does my weight disarrange your equilibrium, monsieur?" he asked. "You will permit me--"

And without waiting for my consent, he relieved the balloon of two bags, which he threw into space.

"Monsieur," said I, taking the only course now possible, "you have come; very well, you will remain; but to me alone belongs the management of the balloon."

"Monsieur," said he, "your urbanity is French all over: it comes from my own country. I morally press the hand you refuse me. Make all precautions, and act as seems best to you. I will wait till you have done--"

"For what?"

"To talk with you."

The barometer had fallen to twenty-six inches. We were nearly six hundred yards above the city; but nothing betrayed the horizontal displacement of the balloon, for the mass of air in which it is

enclosed goes forward with it. A sort of confused glow enveloped the objects spread out under us, and unfortunately obscured their outline.

I examined my companion afresh.

He was a man of thirty years, simply clad. The sharpness of his features betrayed an indomitable energy, and he seemed very muscular. Indifferent to the astonishment he created, he remained motionless, trying to distinguish the objects which were vaguely confused below us.

"Miserable mist!" said he, after a few moments.

I did not reply.

"You owe me a grudge?" he went on. "Bah! I could not pay for my journey, and it was necessary to take you by surprise."

"Nobody asks you to descend, monsieur!"

"Eh, do you not know, then, that the same thing happened to the Counts of Laurencin and Dampierre, when they ascended at Lyons, on the 15th of January, 1784? A young merchant, named Fontaine, scaled the gallery, at the risk of capsizing the machine. He accomplished the journey, and nobody died of it!"

"Once on the ground, we will have an explanation," replied I, piqued at the light tone in which he spoke.

"Bah! Do not let us think of our return."

"Do you think, then, that I shall not hasten to descend?"

"Descend!" said he, in surprise. "Descend? Let us begin by first ascending."

And before I could prevent it, two more bags had been thrown over the car, without even having been emptied.

"Monsieur!" cried I, in a rage.

"I know your ability," replied the unknown quietly, "and your fine ascents are famous. But if Experience is the sister of Practice, she is also a cousin of Theory, and I have studied the aerial art long. It has got into my head!" he added sadly, falling into a silent reverie.

The balloon, having risen some distance farther, now became stationary. The unknown consulted the barometer, and said,--

"Here we are, at eight hundred yards. Men are like insects. See!

I think we should always contemplate them from this height, to judge correctly of their proportions. The Place de la Comédie is transformed into an immense ant-hill. Observe the crowd which is gathered on the quays; and the mountains also get smaller and smaller. We are over the Cathedral. The Main is only a line, cutting the city in two, and the bridge seems a thread thrown between the two banks of the river."

The atmosphere became somewhat chilly.

"There is nothing I would not do for you, my host," said the unknown. "If you are cold, I will take off my coat and lend it to you."

"Thanks," said I dryly.

"Bah! Necessity makes law. Give me your hand. I am your fellow-countryman; you will learn something in my company, and my conversation will indemnify you for the trouble I have given you."

I sat down, without replying, at the opposite extremity of the car. The young man had taken a voluminous manuscript from his great-coat. It was an essay on ballooning.

"I possess," said he, "the most curious collection of engravings

and caricatures extant concerning aerial manias. How people admired and scoffed at the same time at this precious discovery! We are happily no longer in the age in which Montgolfier tried to make artificial clouds with steam, or a gas having electrical properties, produced by the combustion of moist straw and chopped-up wool."

"Do you wish to depreciate the talent of the inventors?" I asked, for I had resolved to enter into the adventure. "Was it not good to have proved by experience the possibility of rising in the air?"

"Ah, monsieur, who denies the glory of the first aerial navigators? It required immense courage to rise by means of those frail envelopes which only contained heated air. But I ask you, has the aerial science made great progress since Blanchard's ascensions, that is, since nearly a century ago? Look here, monsieur."

The unknown took an engraving from his portfolio.

"Here," said he, "is the first aerial voyage undertaken by Pilâtre des Rosiers and the Marquis d'Arlandes, four months after the discovery of balloons. Louis XVI. refused to consent to the venture, and two men who were condemned to death were the first to attempt the aerial ascent. Pilâtre des Rosiers became

indignant at this injustice, and, by means of intrigues, obtained permission to make the experiment. The car, which renders the management easy, had not then been invented, and a circular gallery was placed around the lower and contracted part of the Montgolfier balloon. The two aeronauts must then remain motionless at each extremity of this gallery, for the moist straw which filled it forbade them all motion. A chafing-dish with fire was suspended below the orifice of the balloon; when the aeronauts wished to rise, they threw straw upon this brazier, at the risk of setting fire to the balloon, and the air, more heated, gave it fresh ascending power. The two bold travellers rose, on the 21st of November, 1783, from the Muette Gardens, which the dauphin had put at their disposal. The balloon went up majestically, passed over the Isle of Swans, crossed the Seine at the Conference barrier, and, drifting between the dome of the Invalides and the Military School, approached the Church of Saint Sulpice. Then the aeronauts added to the fire, crossed the Boulevard, and descended beyond the Enfer barrier. As it touched the soil, the balloon collapsed, and for a few moments buried Pilâtre des Rosiers under its folds."

"Unlucky augury," I said, interested in the story, which affected me nearly.

"An augury of the catastrophe which was later to cost this unfortunate man his life," replied the unknown sadly. "Have you

never experienced anything like it?"

"Never,"

"Bah! Misfortunes sometimes occur unforeshadowed!" added my companion.

He then remained silent.

Meanwhile we were advancing southward, and Frankfort had already passed from beneath us.

"Perhaps we shall have a storm," said the young man.

"We shall descend before that," I replied.

"Indeed! It is better to ascend. We shall escape it more surely."

And two more bags of sand were hurled into space.

The balloon rose rapidly, and stopped at twelve hundred yards. I became colder; and yet the sun's rays, falling upon the surface, expanded the gas within, and gave it a greater ascending force.

"Fear nothing," said the unknown. "We have still three thousand five hundred fathoms of breathing air. Besides, do not trouble

yourself about what I do."

I would have risen, but a vigorous hand held me to my seat.

"Your name?" I asked.

"My name? What matters it to you?"

"I demand your name!"

"My name is Erostratus or Empedocles, whichever you choose!"

This reply was far from reassuring.

The unknown, besides, talked with such strange coolness that I anxiously asked myself whom I had to deal with.

"Monsieur," he continued, "nothing original has been imagined since the physicist Charles. Four months after the discovery of balloons, this able man had invented the valve, which permits the gas to escape when the balloon is too full, or when you wish to descend; the car, which aids the management of the machine; the netting, which holds the envelope of the balloon, and divides the weight over its whole surface; the ballast, which enables you to ascend, and to choose the place of your landing; the india-rubber coating, which renders the tissue impermeable; the barometer,

which shows the height attained. Lastly, Charles used hydrogen, which, fourteen times lighter than air, permits you to penetrate to the highest atmospheric regions, and does not expose you to the dangers of a combustion in the air. On the 1st of December, 1783, three hundred thousand spectators were crowded around the Tuileries. Charles rose, and the soldiers presented arms to him. He travelled nine leagues in the air, conducting his balloon with an ability not surpassed by modern aeronauts. The king awarded him a pension of two thousand livres; for then they encouraged new inventions."

The unknown now seemed to be under the influence of considerable agitation.

"Monsieur," he resumed, "I have studied this, and I am convinced that the first aeronauts guided their balloons. Without speaking of Blanchard, whose assertions may be received with doubt, Guyton-Morveaux, by the aid of oars and rudder, made his machine answer to the helm, and take the direction he determined on. More recently, M. Julien, a watchmaker, made some convincing experiments at the Hippodrome, in Paris; for, by a special mechanism, his aerial apparatus, oblong in form, went visibly against the wind. It occurred to M. Petin to place four hydrogen balloons together; and, by means of sails hung horizontally and partly folded, he hopes to be able to disturb the equilibrium, and, thus inclining the apparatus, to convey it in an oblique

direction. They speak, also, of forces to overcome the resistance of currents,--for instance, the screw; but the screw, working on a moveable centre, will give no result. I, monsieur, have discovered the only means of guiding balloons; and no academy has come to my aid, no city has filled up subscriptions for me, no government has thought fit to listen to me! It is infamous!"

The unknown gesticulated fiercely, and the car underwent violent oscillations. I had much trouble in calming him.

Meanwhile the balloon had entered a more rapid current, and we advanced south, at fifteen hundred yards above the earth.

"See, there is Darmstadt," said my companion, leaning over the car. "Do you perceive the château? Not very distinctly, eh? What would you have? The heat of the storm makes the outline of objects waver, and you must have a skilled eye to recognize localities."

"Are you certain it is Darmstadt?" I asked.

"I am sure of it. We are now six leagues from Frankfort."

"Then we must descend."

"Descend! You would not go down, on the steeples," said the

unknown, with a chuckle.

"No, but in the suburbs of the city."

"Well, let us avoid the steeples!"

So speaking, my companion seized some bags of ballast. I hastened to prevent him; but he overthrew me with one hand, and the unballasted balloon ascended to two thousand yards.

"Rest easy," said he, "and do not forget that Brioschi, Biot, Gay-Lussac, Bixio, and Barral ascended to still greater heights to make their scientific experiments."

"Monsieur, we must descend," I resumed, trying to persuade him by gentleness. "The storm is gathering around us. It would be more prudent--"

"Bah! We will mount higher than the storm, and then we shall no longer fear it!" cried my companion. "What is nobler than to overlook the clouds which oppress the earth? Is it not an honour thus to navigate on aerial billows? The greatest men have travelled as we are doing. The Marchioness and Countess de Montalembert, the Countess of Podenas, Mademoiselle la Garde, the Marquis de Montalembert, rose from the Faubourg Saint-Antoine for these unknown regions, and the Duke de Chartres exhibited much

skill and presence of mind in his ascent on the 15th of July, 1784. At Lyons, the Counts of Laurencin and Dampierre; at Nantes, M. de Luynes; at Bordeaux, D'Arbelet des Granges; in Italy, the Chevalier Andreani; in our own time, the Duke of Brunswick,--have all left the traces of their glory in the air. To equal these great personages, we must penetrate still higher than they into the celestial depths! To approach the infinite is to comprehend it!"

The rarefaction of the air was fast expanding the hydrogen in the balloon, and I saw its lower part, purposely left empty, swell out, so that it was absolutely necessary to open the valve; but my companion did not seem to intend that I should manage the balloon as I wished. I then resolved to pull the valve cord secretly, as he was excitedly talking; for I feared to guess with whom I had to deal. It would have been too horrible! It was nearly a quarter before one. We had been gone forty minutes from Frankfort; heavy clouds were coming against the wind from the south, and seemed about to burst upon us.

"Have you lost all hope of succeeding in your project?" I asked with anxious interest.

"All hope!" exclaimed the unknown in a low voice. "Wounded by slights and caricatures, these asses' kicks have finished me! It is the eternal punishment reserved for innovators! Look at these

caricatures of all periods, of which my portfolio is full."

While my companion was fumbling with his papers, I had seized the valve-cord without his perceiving it. I feared, however, that he might hear the hissing noise, like a water-course, which the gas makes in escaping.

"How many jokes were made about the Abbé Miolan!" said he. "He was to go up with Janninet and Bredin. During the filling their balloon caught fire, and the ignorant populace tore it in pieces! Then this caricature of 'curious animals' appeared, giving each of them a punning nickname."

I pulled the valve-cord, and the barometer began to ascend. It was time. Some far-off rumblings were heard in the south.

"Here is another engraving," resumed the unknown, not suspecting what I was doing. "It is an immense balloon carrying a ship, strong castles, houses, and so on. The caricaturists did not suspect that their follies would one day become truths. It is complete, this large vessel. On the left is its helm, with the pilot's box; at the prow are pleasure-houses, an immense organ, and a cannon to call the attention of the inhabitants of the earth or the moon; above the poop there are the observatory and the balloon long-boat; in the equatorial circle, the army barrack; on the left, the funnel; then the upper galleries for

promenading, sails, pinions; below, the cafés and general storehouse. Observe this pompous announcement: 'Invented for the happiness of the human race, this globe will depart at once for the ports of the Levant, and on its return the programme of its voyages to the two poles and the extreme west will be announced. No one need furnish himself with anything; everything is foreseen, and all will prosper. There will be a uniform price for all places of destination, but it will be the same for the most distant countries of our hemisphere--that is to say, a thousand louis for one of any of the said journeys. And it must be confessed that this sum is very moderate, when the speed, comfort, and arrangements which will be enjoyed on the balloon are considered--arrangements which are not to be found on land, while on the balloon each passenger may consult his own habits and tastes. This is so true that in the same place some will be dancing, others standing; some will be enjoying delicacies; others fasting. Whoever desires the society of wits may satisfy himself; whoever is stupid may find stupid people to keep him company. Thus pleasure will be the soul of the aerial company.' All this provoked laughter; but before long, if I am not cut off, they will see it all realized."

We were visibly descending. He did not perceive it!

"This kind of 'game at balloons,'" he resumed, spreading out before me some of the engravings of his valuable collection,

"this game contains the entire history of the aerostatic art. It is used by elevated minds, and is played with dice and counters, with whatever stakes you like, to be paid or received according to where the player arrives."

"Why," said I, "you seem to have studied the science of aerostation profoundly."

"Yes, monsieur, yes! From Phaethon, Icarus, Architas, I have searched for, examined, learnt everything. I could render immense services to the world in this art, if God granted me life. But that will not be!"

"Why?"

"Because my name is Empedocles, or Erostratus."

Meanwhile, the balloon was happily approaching the earth; but when one is falling, the danger is as great at a hundred feet as at five thousand.

"Do you recall the battle of Fleurus?" resumed my companion, whose face became more and more animated. "It was at that battle that Contello, by order of the Government, organized a company of balloonists. At the siege of Manbenge General Jourdan derived so much service from this new method of observation that Contello

ascended twice a day with the general himself. The communications between the aeronaut and his agents who held the balloon were made by means of small white, red, and yellow flags. Often the gun and cannon shot were directed upon the balloon when he ascended, but without result. When General Jourdan was preparing to invest Charleroi, Contello went into the vicinity, ascended from the plain of Jumet, and continued his observations for seven or eight hours with General Morlot, and this no doubt aided in giving us the victory of Fleurus. General Jourdan publicly acknowledged the help which the aeronautical observations had afforded him. Well, despite the services rendered on that occasion and during the Belgian campaign, the year which had seen the beginning of the military career of balloons saw also its end. The school of Meudon, founded by the Government, was closed by Buonaparte on his return from Egypt. And now, what can you expect from the new-born infant? as Franklin said. The infant was born alive; it should not be stifled!"

The unknown bowed his head in his hands, and reflected for some moments; then raising his head, he said,--

"Despite my prohibition, monsieur, you have opened the valve."

I dropped the cord.

"Happily," he resumed, "we have still three hundred pounds of

ballast."

"What is your purpose?" said I.

"Have you ever crossed the seas?" he asked.

I turned pale.

"It is unfortunate," he went on, "that we are being driven towards the Adriatic. That is only a stream; but higher up we may find other currents."

And, without taking any notice of me, he threw over several bags of sand; then, in a menacing voice, he said,--

"I let you open the valve because the expansion of the gas threatened to burst the balloon; but do not do it again!"

Then he went on as follows:--

"You remember the voyage of Blanchard and Jeffries from Dover to Calais? It was magnificent! On the 7th of January, 1785, there being a north-west wind, their balloon was inflated with gas on the Dover coast. A mistake of equilibrium, just as they were ascending, forced them to throw out their ballast so that they might not go down again, and they only kept thirty pounds. It was

too little; for, as the wind did not freshen, they only advanced very slowly towards the French coast. Besides, the permeability of the tissue served to reduce the inflation little by little, and in an hour and a half the aeronauts perceived that they were descending.

"'What shall we do?' said Jeffries.

"'We are only one quarter of the way over,' replied Blanchard, 'and very low down. On rising, we shall perhaps meet more favourable winds.'

"'Let us throw out the rest of the sand.'

"The balloon acquired some ascending force, but it soon began to descend again. Towards the middle of the transit the aeronauts threw over their books and tools. A quarter of an hour after, Blanchard said to Jeffries,--

"'The barometer?'

"'It is going up! We are lost, and yet there is the French coast.'

"A loud noise was heard.

"'Has the balloon burst?' asked Jeffries.

"'No. The loss of the gas has reduced the inflation of the lower part of the balloon. But we are still descending. We are lost! Out with everything useless!'

"Provisions, oars, and rudder were thrown into the sea. The aeronauts were only one hundred yards high.

"'We are going up again,' said the doctor.

"'No. It is the spurt caused by the diminution of the weight, and not a ship in sight, not a bark on the horizon! To the sea with our clothing!'

"The unfortunates stripped themselves, but the balloon continued to descend.

"'Blanchard,' said Jeffries, 'you should have made this voyage alone; you consented to take me; I will sacrifice myself! I am going to throw myself into the water, and the balloon, relieved of my weight, will mount again.'

"'No, no! It is frightful!'

"The balloon became less and less inflated, and as it doubled up

its concavity pressed the gas against the sides, and hastened its downward course.

"'Adieu, my friend," said the doctor. 'God preserve you!'

"He was about to throw himself over, when Blanchard held him back.

"'There is one more chance,' said he. 'We can cut the cords which hold the car, and cling to the net! Perhaps the balloon will rise. Let us hold ourselves ready. But--the barometer is going down! The wind is freshening! We are saved!'

"The aeronauts perceived Calais. Their joy was delirious. A few moments more, and they had fallen in the forest of Guines. I do not doubt," added the unknown, "that, under similar circumstances, you would have followed Doctor Jeffries' example!"

The clouds rolled in glittering masses beneath us. The balloon threw large shadows on this heap of clouds, and was surrounded as by an aureola. The thunder rumbled below the car. All this was terrifying.

"Let us descend!" I cried.

"Descend, when the sun is up there, waiting for us? Out with more

bags!"

And more than fifty pounds of ballast were cast over.

At a height of three thousand five hundred yards we remained stationary.

The unknown talked unceasingly. I was in a state of complete prostration, while he seemed to be in his element.

"With a good wind, we shall go far," he cried. "In the Antilles there are currents of air which have a speed of a hundred leagues an hour. When Napoleon was crowned, Garnerin sent up a balloon with coloured lamps, at eleven o'clock at night. The wind was blowing north-north-west. The next morning, at daybreak, the inhabitants of Rome greeted its passage over the dome of St. Peter's. We shall go farther and higher!"

I scarcely heard him. Everything whirled around me. An opening appeared in the clouds.

"See that city," said the unknown. "It is Spires!"

I leaned over the car and perceived a small blackish mass. It was Spires. The Rhine, which is so large, seemed an unrolled ribbon. The sky was a deep blue over our heads. The birds had long

abandoned us, for in that rarefied air they could not have flown. We were alone in space, and I in presence of this unknown!

"It is useless for you to know whither I am leading you," he said, as he threw the compass among the clouds. "Ah! a fall is a grand thing! You know that but few victims of ballooning are to be reckoned, from Pilâtre des Rosiers to Lieutenant Gale, and that the accidents have always been the result of imprudence. Pilâtre des Rosiers set out with Romain of Boulogne, on the 13th of June, 1785. To his gas balloon he had affixed a Montgolfier apparatus of hot air, so as to dispense, no doubt, with the necessity of losing gas or throwing out ballast. It was putting a torch under a powder-barrel. When they had ascended four hundred yards, and were taken by opposing winds, they were driven over the open sea. Pilâtre, in order to descend, essayed to open the valve, but the valve-cord became entangled in the balloon, and tore it so badly that it became empty in an instant. It fell upon the Montgolfier apparatus, overturned it, and dragged down the unfortunates, who were soon shattered to pieces! It is frightful, is it not?"

I could only reply, "For pity's sake, let us descend!"

The clouds gathered around us on every side, and dreadful detonations, which reverberated in the cavity of the balloon, took place beneath us.

"You provoke me," cried the unknown, "and you shall no longer know whether we are rising or falling!"

The barometer went the way of the compass, accompanied by several more bags of sand. We must have been 5000 yards high. Some icicles had already attached themselves to the sides of the car, and a kind of fine snow seemed to penetrate to my very bones. Meanwhile a frightful tempest was raging under us, but we were above it.

"Do not be afraid," said the unknown. "It is only the imprudent who are lost. Olivari, who perished at Orleans, rose in a paper 'Montgolfier;' his car, suspended below the chafing-dish, and ballasted with combustible materials, caught fire; Olivari fell, and was killed! Mosment rose, at Lille, on a light tray; an oscillation disturbed his equilibrium; Mosment fell, and was killed! Bittorf, at Mannheim, saw his balloon catch fire in the air; and he, too, fell, and was killed! Harris rose in a badly constructed balloon, the valve of which was too large and would not shut; Harris fell, and was killed! Sadler, deprived of ballast by his long sojourn in the air, was dragged over the town of Boston and dashed against the chimneys; Sadler fell, and was killed! Cokling descended with a convex parachute which he pretended to have perfected; Cokling fell, and was killed! Well, I love them, these victims of their own imprudence, and I shall

die as they did. Higher! still higher!"

All the phantoms of this necrology passed before my eyes. The rarefaction of the air and the sun's rays added to the expansion of the gas, and the balloon continued to mount. I tried mechanically to open the valve, but the unknown cut the cord several feet above my head. I was lost!

"Did you see Madame Blanchard fall?" said he. "I saw her; yes, I! I was at Tivoli on the 6th of July, 1819. Madame Blanchard rose in a small sized balloon, to avoid the expense of filling, and she was forced to entirely inflate it. The gas leaked out below, and left a regular train of hydrogen in its path. She carried with her a sort of pyrotechnic aureola, suspended below her car by a wire, which she was to set off in the air. This she had done many times before. On this day she also carried up a small parachute ballasted by a firework contrivance, that would go off in a shower of silver. She was to start this contrivance after having lighted it with a port-fire made on purpose. She set out; the night was gloomy. At the moment of lighting her fireworks she was so imprudent as to pass the taper under the column of hydrogen which was leaking from the balloon. My eyes were fixed upon her. Suddenly an unexpected gleam lit up the darkness. I thought she was preparing a surprise. The light flashed out, suddenly disappeared and reappeared, and gave the summit of the balloon the shape of an immense jet of ignited gas. This sinister

glow shed itself over the Boulevard and the whole Montmartre quarter. Then I saw the unhappy woman rise, try twice to close the appendage of the balloon, so as to put out the fire, then sit down in her car and try to guide her descent; for she did not fall. The combustion of the gas lasted for several minutes. The balloon, becoming gradually less, continued to descend, but it was not a fall. The wind blew from the north-west and drove it towards Paris. There were then some large gardens just by the house No. 16, Rue de Provence. Madame Blanchard essayed to fall there without danger: but the balloon and the car struck on the roof of the house with a light shock. 'Save me!' cried the wretched woman. I got into the street at this moment. The car slid along the roof, and encountered an iron cramp. At this concussion, Madame Blanchard was thrown out of her car and precipitated upon the pavement. She was killed!"

These stories froze me with horror. The unknown was standing with bare head, dishevelled hair, haggard eyes!

There was no longer any illusion possible. I at last recognized the horrible truth. I was in the presence of a madman!

He threw out the rest of the ballast, and we must have now reached a height of at least nine thousand yards. Blood spurted from my nose and mouth!

"Who are nobler than the martyrs of science?" cried the lunatic. "They are canonized by posterity."

But I no longer heard him. He looked about him, and, bending down to my ear, muttered,--

"And have you forgotten Zambecarri's catastrophe? Listen. On the 7th of October, 1804, the clouds seemed to lift a little. On the preceding days, the wind and rain had not ceased; but the announced ascension of Zambecarri could not be postponed. His enemies were already bantering him. It was necessary to ascend, to save the science and himself from becoming a public jest. It was at Boulogne. No one helped him to inflate his balloon.

"He rose at midnight, accompanied by Andreoli and Grossetti. The balloon mounted slowly, for it had been perforated by the rain, and the gas was leaking out. The three intrepid aeronauts could only observe the state of the barometer by aid of a dark lantern. Zambecarri had eaten nothing for twenty-four hours. Grossetti was also fasting.

"'My friends,' said Zambecarri, 'I am overcome by cold, and exhausted. I am dying.'

"He fell inanimate in the gallery. It was the same with Grossetti. Andreoli alone remained conscious. After long efforts,

he succeeded in reviving Zambecarri.

"'What news? Whither are we going? How is the wind? What time is it?'

"'It is two o'clock.'

"'Where is the compass?'

"'Upset!'

"'Great God! The lantern has gone out!'

"'It cannot burn in this rarefied air,' said Zambecarri.

"The moon had not risen, and the atmosphere was plunged in murky darkness.

"'I am cold, Andreoli. What shall I do?'

"They slowly descended through a layer of whitish clouds.

"'Sh!' said Andreoli. 'Do you hear?'

"'What?' asked Zambecarri.

"'A strange noise.'

"'You are mistaken.'

"'No.'

"Consider these travellers, in the middle of the night, listening to that unaccountable noise! Are they going to knock against a tower? Are they about to be precipitated on the roofs?

"'Do you hear? One would say it was the noise of the sea.'

"'Impossible!'

"'It is the groaning of the waves!'

"'It is true.'

"'Light! light!'

"After five fruitless attempts, Andreoli succeeded in obtaining light. It was three o'clock.

"The voice of violent waves was heard. They were almost touching the surface of the sea!

"'We are lost!' cried Zambecarri, seizing a large bag of sand.

"'Help!' cried Andreoli.

"The car touched the water, and the waves came up to their breasts.

"'Throw out the instruments, clothes, money!'

"The aeronauts completely stripped themselves. The balloon, relieved, rose with frightful rapidity. Zambecarri was taken with vomiting. Grossetti bled profusely. The unfortunate men could not speak, so short was their breathing. They were taken with cold, and they were soon crusted over with ice. The moon looked as red as blood.

"After traversing the high regions for a half-hour, the balloon again fell into the sea. It was four in the morning. They were half submerged in the water, and the balloon dragged them along, as if under sail, for several hours.

"At daybreak they found themselves opposite Pesaro, four miles from the coast. They were about to reach it, when a gale blew them back into the open sea. They were lost! The frightened boats fled at their approach. Happily, a more intelligent boatman accosted them, hoisted them on board, and they landed at Ferrada.

"A frightful journey, was it not? But Zambecarri was a brave and energetic man. Scarcely recovered from his sufferings, he resumed his ascensions. During one of them he struck against a tree; his spirit-lamp was broken on his clothes; he was enveloped in fire, his balloon began to catch the flames, and he came down half consumed.

"At last, on the 21st of September, 1812, he made another ascension at Boulogne. The balloon clung to a tree, and his lamp again set it on fire. Zambecarri fell, and was killed! And in presence of these facts, we would still hesitate! No. The higher we go, the more glorious will be our death!"

The balloon being now entirely relieved of ballast and of all it contained, we were carried to an enormous height. It vibrated in the atmosphere. The least noise resounded in the vaults of heaven. Our globe, the only object which caught my view in immensity, seemed ready to be annihilated, and above us the depths of the starry skies were lost in thick darkness.

I saw my companion rise up before me.

"The hour is come!" he said. "We must die. We are rejected of men. They despise us. Let us crush them!"

"Mercy!" I cried.

"Let us cut these cords! Let this car be abandoned in space. The attractive force will change its direction, and we shall approach the sun!"

Despair galvanized me. I threw myself upon the madman, we struggled together, and a terrible conflict took place. But I was thrown down, and while he held me under his knee, the madman was cutting the cords of the car.

"One!" he cried.

"My God!"

"Two! Three!"

I made a superhuman effort, rose up, and violently repulsed the madman.

"Four!"

The car fell, but I instinctively clung to the cords and hoisted myself into the meshes of the netting.

The madman disappeared in space!

The balloon was raised to an immeasurable height. A horrible cracking was heard. The gas, too much dilated, had burst the balloon. I shut my eyes--

Some instants after, a damp warmth revived me. I was in the midst of clouds on fire. The balloon turned over with dizzy velocity. Taken by the wind, it made a hundred leagues an hour in a horizontal course, the lightning flashing around it.

Meanwhile my fall was not a very rapid one. When I opened my eyes, I saw the country. I was two miles from the sea, and the tempest was driving me violently towards it, when an abrupt shock forced me to loosen my hold. My hands opened, a cord slipped swiftly between my fingers, and I found myself on the solid earth!

It was the cord of the anchor, which, sweeping along the surface of the ground, was caught in a crevice; and my balloon, unballasted for the last time, careered off to lose itself beyond the sea.

When I came to myself, I was in bed in a peasant's cottage, at Harderwick, a village of La Gueldre, fifteen leagues from Amsterdam, on the shores of the Zuyder-Zee.

A miracle had saved my life, but my voyage had been a series of imprudences, committed by a lunatic, and I had not been able to prevent them.

May this terrible narrative, though instructing those who read it, not discourage the explorers of the air.