

Entangled TOMES

# Our Past in the Uncanny Valley



edited by Katherine Nabity

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## **Entangled Continua Publishing**

Entangled Tomes feature newly formatted versions of lost classics and curated anthologies of works from the 19th and early 20th centuries. For news about future releases, sign up for the Entangled Continua Publishing newsletter: <http://eepurl.com/bLJVH>

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# Introduction

Assume for the sake of argument that conscious beings have existed for some twenty million years: see what strides machines have made in the last thousand! May not the world last twenty million years longer? If so, what will they not in the end become? Is it not safer to nip the mischief in the bud and to forbid them further progress?

– Samuel Butler, *Erewhon*, Ch. 23: The Book of the Machines, 1872

In 1770, Wolfgang von Kempelen displayed his miraculous new invention at the court of Empress Maria Theresa of Austria: the mechanical Turk. The Turk was the life-sized figure of a man dressed in a turban and robes, sitting behind a cabinet upon which a chessboard could be placed. Indeed, chess was the Turk's occupation. The automaton moved its own pieces, rolled its eyes in seeming exasperation at a slow adversary, and even cleared the board in seeming frustration after catching an opponent cheating. Chess was incredibly popular in late 18th century Europe and the Turk proved to be a savvy player.

Automata were not a new thing at this time. Jacques de Vaucanson had impressed the high and mighty of Vienna with numerous mechanical wonders, including a flute player and a realistic mechanical duck. While these and other automaton of the time were impressive, none inspired as much excitement or angst as the Turk. While Vaucanson's duck had the ability to flap its wings and digest food, as a living organism might, it was an animal in shape. While the flute player was a full-sized pastoral shepherd in form, its actions were limited to a repertoire of twelve songs. The Turk combined both sensational aspects: it was life-like in form and had the ability to play a game that was based on more than rote action. But surely, machines couldn't think, could they?

What a machine might or might not be able to do was a fuzzy concept in the 18th and 19th centuries. This was over sixty years before Charles Babbage described his analytical engine. The actual building of that device was yet another century in the future. The Turk's debut, though, was after Vaucanson's attempt to modernize the weaving industry in France. Weavers revolted against Vaucanson's innovations in part due to fear of their own

replacement. Vaucanson's automatic looms were put aside, but the fears were not. If an automaton could play chess, a thinking man's game, couldn't a machine replace any man, any where?

Though it seems obvious today that the Turk couldn't possibly play chess—it was indeed a clever hoax—we are still struck with similar fears. Artificial intelligence algorithms have won at chess, Go, and the TV trivia game *Jeopardy*. Watching a one-armed, four-legged robot created by Boston Dynamics open a door, and hold it open for its compatriot, is both fascinating and slightly disturbing. Surprisingly, our reactions to automata over 100 years ago and artificial intelligences today aren't much different. We vacillate between horror and humor. For every murderous Maxon's Master or Terminator, we laugh at the pre-Roomba antics of Ely's Automatic Housemaid and memes in which an artificial intelligence, taught with deep learning, decides that every photo of a grassy hill also includes sheep.

Masahiro Mori coined the phrase "uncanny valley" in a 1970 paper. The concept refers to our potential dip in affinity when faced with dolls, animations, and robots that are *almost* human. The theory remains somewhat divisive, but it goes a long way to describe the gut-level fear of being replaced by automated machines. It's interesting to note that among these stories, the lighter, funnier tales often involve automata that aren't human-shaped; meanwhile, one of the biggest insults hurled is to refer to someone as an automaton.

This anthology is structured roughly chronologically, but also with stories falling into certain groups by author or theme. Mostly, I've centered on stories of human-looking automata. If I've made exceptions, it was due to the quality of the story or its representation in the group. My selections were also limited by size and public domain availability of stories. For one example, Edward Sylvester Ellis's Steam Man of the Prairies is not included due to the length of *The Huge Hunter*, but also because the Steam Man is fairly secondary in the plot. For a second example, I wasn't able to find a primary source available for "The Clericomotor," a humorous tale about a robot replacement for a parson that would have fit well along side "Ely's Automatic Housemaid." By no means is this anthology inclusive of all the works available nor do I want to hide the fact that my thoughts on each category of story are only very general observations on themes over time.

The truly compelling thing about these stories is that, while all of them are over one hundred years old, they mirror contemporary views about



technologies that are just beyond our common understanding. To worry about the effects of technology is not a new thing and neither is our response to it through science fiction and fantasy literature.

# E. T. A. Hoffmann's Automata

"The Sand-man"

"Automatons"

His name might not be familiar, but German writer E. T. A. Hoffmann is best known to modern audiences as the writer of "The Nutcracker and the Mouse King," the novella upon which the popular Tchaikovsky ballet is based. Ernst Theodor Amadeus Hoffmann (1776–1822) included more automata and automata-like characters in his stories than just the nutcracker and toys that come to life during Marie's Christmas dreams.

"Automatons" was written in 1814, over three years before the publication of Mary Shelley's *Frankenstein* (a work that is somewhat automaton-adjacent), but didn't see wider publication until 1819 (after the publication of "The Sand-man") when it was included in volume one of *The Serapion Brethren*, a collection of works that also includes "The Nutcracker and the Mouse King." "The Sand-man" was published in the interim in 1816 in *Night Pieces*.

Perhaps of all the authors in this collection of stories, Hoffmann most directly addresses the fundamental unease that can be experienced when confronted with a human-seeming machine. In "Automatons," the protagonist, Lewis, objects to "counterfeit humanity" on principle before ever encountering the popular Talking Turk. Hoffmann understood the uncanny valley well before the concept was so named.

In "The Sand-man," Hoffmann directly addresses the fear that an automaton could be taken for a human being. The greatest insult that Nathanael hurls at Clara is that she is a "damned lifeless automaton." He later falls in love with a true automaton woman whose greatest asset seems to be that she will not criticize Nathanael. But what of the creator of Olimpia, the automaton woman?

"Spalanzani was obliged, as has been said, to leave the place in order to escape a criminal charge of having fraudulently imposed an automaton upon human society."



# "The Sand-man"

E. T. A. Hoffmann

translated by J. T. Bealby

(1816) [[1](#)]

## NATHANAEL TO LOTHAIR.

I know you are all very uneasy because I have not written for such a long, long time. Mother, to be sure, is angry, and Clara, I dare say, believes I am living here in riot and revelry, and quite forgetting my sweet angel, whose image is so deeply engraved upon my heart and mind. But that is not so; daily and hourly do I think of you all, and my lovely Clara's form comes to gladden me in my dreams, and smiles upon me with her bright eyes, as graciously as she used to do in the days when I went in and out amongst you. Oh! how could I write to you in the distracted state of mind in which I have been, and which, until now, has quite bewildered me! A terrible thing has happened to me. Dark forebodings of some awful fate threatening me are spreading themselves out over my head like black clouds, impenetrable to every friendly ray of sunlight. I must now tell you what has taken place; I must, that I see well enough, but only to think upon it makes the wild laughter burst from my lips. Oh! my dear, dear Lothair, what shall I say to make you feel, if only in an inadequate way, that that which happened to me a few days ago could thus really exercise such a hostile and disturbing influence upon my life? Oh that you were here to see for yourself! but now you will, I suppose, take me for a superstitious ghost-seer. In a word, the terrible thing which I have experienced, the fatal effect of which I in vain exert every effort to shake off, is simply that some days ago, namely, on the 30th October, at twelve o'clock at noon, a dealer in weather glasses came into my room and wanted to sell me one of his wares. I bought nothing, and threatened to kick him downstairs, whereupon he went away of his own accord.

You will conclude that it can only be very peculiar relations—relations intimately intertwined with my life—that can give significance to this event, and that it must be the person of this unfortunate hawker which has had such

a very inimical effect upon me. And so it really is. I will summon up all my faculties in order to narrate to you calmly and patiently as much of the early days of my youth as will suffice to put matters before you in such a way that your keen sharp intellect may grasp everything clearly and distinctly, in bright and living pictures. Just as I am beginning, I hear you laugh and Clara say, "What's all this childish nonsense about!" Well, laugh at me, laugh heartily at me, pray do. But, good God! my hair is standing on end, and I seem to be entreating you to laugh at me in the same sort of frantic despair in which Franz Moor entreated Daniel to laugh him to scorn. [2] But to my story.

Except at dinner we, i.e., I and my brothers and sisters, saw but little of our father all day long. His business no doubt took up most of his time. After our evening meal, which, in accordance with an old custom, was served at seven o'clock, we all went, mother with us, into father's room, and took our places around a round table. My father smoked his pipe, drinking a large glass of beer to it. Often he told us many wonderful stories, and got so excited over them that his pipe always went out; I used then to light it for him with a spill, and this formed my chief amusement. Often, again, he would give us picture books to look at, whilst he sat silent and motionless in his easy chair, puffing out such dense clouds of smoke that we were all as it were enveloped in mist. On such evenings mother was very sad; and directly it struck nine she said, "Come, children! off to bed! Come! The 'Sand-man' is come I see." And I always did seem to hear something trampling upstairs with slow heavy steps; that must be the Sand-man. Once in particular I was very much frightened at this dull trampling and knocking; as mother was leading us out of the room I asked her, "O mamma! but who is this nasty Sand-man who always sends us away from papa? What does he look like?" "There is no Sand-man, my dear child," mother answered; "when I say the Sand-man is come, I only mean that you are sleepy and can't keep your eyes open, as if somebody had put sand in them." This answer of mother's did not satisfy me; nay, in my childish mind the thought clearly unfolded itself that mother denied there was a Sand-man only to prevent us being afraid,—why, I always heard him come upstairs. Full of curiosity to learn something more about this Sand-man and what he had to do with us children, I at length asked the old woman who acted as my youngest sister's attendant, what sort of a man he was—the Sand-man? "Why, 'thanael, darling, don't you know?" she replied. "Oh! he's a wicked man, who comes to little children when they

won't go to bed and throws handfuls of sand in their eyes, so that they jump out of their heads all bloody; and he puts them into a bag and takes them to the half-moon as food for his little ones; and they sit there in the nest and have hooked beaks like owls, and they pick naughty little boys' and girls' eyes out with them." After this I formed in my own mind a horrible picture of the cruel Sand-man. When anything came blundering upstairs at night I trembled with fear and dismay; and all that my mother could get out of me were the stammered words "The Sandman! the Sand-man!" whilst the tears coursed down my cheeks. Then I ran into my bedroom, and the whole night through tormented myself with the terrible apparition of the Sand-man. I was quite old enough to perceive that the old woman's tale about the Sand-man and his little ones' nest in the half-moon couldn't be altogether true; nevertheless the Sand-man continued to be for me a fearful incubus, and I was always seized with terror—my blood always ran cold, not only when I heard anybody come up the stairs, but when I heard anybody noisily open my father's room door and go in. Often he stayed away for a long season altogether; then he would come several times in close succession.

This went on for years, without my being able to accustom myself to this fearful apparition, without the image of the horrible Sand-man growing any fainter in my imagination. His intercourse with my father began to occupy my fancy ever more and more; I was restrained from asking my father about him by an unconquerable shyness; but as the years went on the desire waxed stronger and stronger within me to fathom the mystery myself and to see the fabulous Sand-man. He had been the means of disclosing to me the path of the wonderful and the adventurous, which so easily find lodgment in the mind of the child. I liked nothing better than to hear or read horrible stories of goblins, witches, Tom Thumbs, and so on; but always at the head of them all stood the Sand-man, whose picture I scribbled in the most extraordinary and repulsive forms with both chalk and coal everywhere, on the tables, and cupboard doors, and walls. When I was ten years old my mother removed me from the nursery into a little chamber off the corridor not far from my father's room. We still had to withdraw hastily whenever, on the stroke of nine, the mysterious unknown was heard in the house. As I lay in my little chamber I could hear him go into father's room, and soon afterwards I fancied there was a fine and peculiar smelling steam spreading itself through the house. As my curiosity waxed stronger, my resolve to make somehow or other the Sand-man's acquaintance took deeper root. Often when

my mother had gone past, I slipped quickly out of my room into the corridor, but I could never see anything, for always before I could reach the place where I could get sight of him, the Sand-man was well inside the door. At last, unable to resist the impulse any longer, I determined to conceal myself in father's room and there wait for the Sand-man.

One evening I perceived from my father's silence and mother's sadness that the Sand-man would come; accordingly, pleading that I was excessively tired, I left the room before nine o'clock and concealed myself in a hiding place close beside the door. The street door creaked, and slow, heavy, echoing steps crossed the passage towards the stairs. Mother hurried past me with my brothers and sisters. Softly—softly—I opened father's room door. He sat as usual, silent and motionless, with his back towards it; he did not hear me; and in a moment I was in and behind a curtain drawn before my father's open wardrobe, which stood just inside the room. Nearer and nearer and nearer came the echoing footsteps. There was a strange coughing and shuffling and mumbling outside. My heart beat with expectation and fear. A quick step now close, close beside the door, a noisy rattle of the handle, and the door flies open with a bang. Recovering my courage with an effort, I take a cautious peep out. In the middle of the room in front of my father stands the Sand-man, the bright light of the lamp falling full upon his face. The Sand-man, the terrible Sand-man, is the old advocate Coppelius who often comes to dine with us.

But the most hideous figure could not have awakened greater trepidation in my heart than this Coppelius did. Picture to yourself a large broad-shouldered man, with an immensely big head, a face the colour of yellow-ochre, grey bushy eyebrows, from beneath which two piercing, greenish, cat-like eyes glittered, and a prominent Roman nose hanging over his upper lip. His distorted mouth was often screwed up into a malicious smile; then two dark red spots appeared on his cheeks, and a strange hissing noise proceeded from between his tightly clenched teeth. He always wore an ash-grey coat of an old-fashioned cut, a waistcoat of the same, and nether extremities to match, but black stockings and buckles set with stones on his shoes. His little wig scarcely extended beyond the crown of his head, his hair was curled round high up above his big red ears, and plastered to his temples with cosmetic, and a broad closed hair bag stood out prominently from his neck, so that you could see the silver buckle that fastened his folded neckcloth. Altogether he was a most disagreeable and horribly ugly figure;

but what we children detested most of all was his big coarse hairy hands; we could never fancy anything that he had once touched. This he had noticed; and so, whenever our good mother quietly placed a piece of cake or sweet fruit on our plates, he delighted to touch it under some pretext or other, until the bright tears stood in our eyes, and from disgust and loathing we lost the enjoyment of the tit-bit that was intended to please us. And he did just the same thing when father gave us a glass of sweet wine on holidays. Then he would quickly pass his hand over it, or even sometimes raise the glass to his blue lips, and he laughed quite sardonically when all we dared do was to express our vexation in stifled sobs. He habitually called us the "little brutes;" and when he was present we might not utter a sound; and we cursed the ugly spiteful man who deliberately and intentionally spoilt all our little pleasures. Mother seemed to dislike this hateful Coppelius as much as we did; for as soon as he appeared her cheerfulness and bright and natural manner were transformed into sad, gloomy seriousness. Father treated him as if he were a being of some higher race, whose ill manners were to be tolerated, whilst no efforts ought to be spared to keep him in good humour. He had only to give a slight hint, and his favourite dishes were cooked for him and rare wine uncorked.

As soon as I saw this Coppelius, therefore, the fearful and hideous thought arose in my mind that he, and he alone, must be the Sand-man; but I no longer conceived of the Sand-man as the bugbear in the old nurse's fable, who fetched children's eyes and took them to the half-moon as food for his little ones—no! but as an ugly spectre-like fiend bringing trouble and misery and ruin, both temporal and everlasting, everywhere wherever he appeared.

I was spellbound on the spot. At the risk of being discovered, and, as I well enough knew, of being severely punished, I remained as I was, with my head thrust through the curtains listening. My father received Coppelius in a ceremonious manner. "Come, to work!" cried the latter, in a hoarse snarling voice, throwing off his coat. Gloomily and silently my father took off his dressing gown, and both put on long black smock-frocks. Where they took them from I forgot to notice. Father opened the folding doors of a cupboard in the wall; but I saw that what I had so long taken to be a cupboard was really a dark recess, in which was a little hearth. Coppelius approached it, and a blue flame crackled upwards from it. Round about were all kinds of strange utensils. Good God! as my old father bent down over the fire how different he looked! His gentle and venerable features seemed to be drawn up by some



dreadful convulsive pain into an ugly, repulsive Satanic mask. He looked like Coppelius. Coppelius plied the red-hot tongs and drew bright glowing masses out of the thick smoke and began assiduously to hammer them. I fancied that there were men's faces visible round about, but without eyes, having ghastly deep black holes where the eyes should have been. "Eyes here! Eyes here!" cried Coppelius, in a hollow sepulchral voice. My blood ran cold with horror; I screamed and tumbled out of my hiding place into the floor. Coppelius immediately seized upon me. "You little brute! You little brute!" he bleated, grinding his teeth. Then, snatching me up, he threw me on the hearth, so that the flames began to singe my hair. "Now we've got eyes—eyes—a beautiful pair of children's eyes," he whispered, and, thrusting his hands into the flames he took out some red-hot grains and was about to strew them into my eyes. Then my father clasped his hands and entreated him, saying, "Master, master, let my Nathanael keep his eyes—oh! do let him keep them." Coppelius laughed shrilly and replied, "Well then, the boy may keep his eyes and whine and pule his way through the world; but we will now at any rate observe the mechanism of the hand and the foot." And therewith he roughly laid hold upon me, so that my joints cracked, and twisted my hands and my feet, pulling them now this way, and now that, "That's not quite right altogether! It's better as it was!—the old fellow knew what he was about." Thus lisped and hissed Coppelius; but all around me grew black and dark; a sudden convulsive pain shot through all my nerves and bones; I knew nothing more.

I felt a soft warm breath fanning my cheek; I awakened as if out of the sleep of death; my mother was bending over me. "Is the Sand-man still there?" I stammered. "No, my dear child; he's been gone a long, long time; he'll not hurt you." Thus spoke my mother, as she kissed her recovered darling and pressed him to her heart. But why should I tire you, my dear Lothair? why do I dwell at such length on these details, when there's so much remains to be said? Enough—I was detected in my eavesdropping, and roughly handled by Coppelius. Fear and terror had brought on a violent fever, of which I lay ill several weeks. "Is the Sand-man still there?" these were the first words I uttered on coming to myself again, the first sign of my recovery, of my safety. Thus, you see, I have only to relate to you the most terrible moment of my youth for you to thoroughly understand that it must not be ascribed to the weakness of my eyesight if all that I see is colourless, but to the fact that a mysterious destiny has hung a dark veil of clouds about my life, which I shall perhaps only break through when I die.

Coppelius did not show himself again; it was reported he had left the town.

It was about a year later when, in pursuance of the old unchanged custom, we sat around the round table in the evening. Father was in very good spirits, and was telling us amusing tales about his youthful travels. As it was striking nine we all at once heard the street door creak on its hinges, and slow ponderous steps echoed across the passage and up the stairs. "That is Coppelius," said my mother, turning pale. "Yes, it is Coppelius," replied my father in a faint broken voice. The tears started from my mother's eyes. "But, father, father," she cried, "must it be so?" "This is the last time," he replied; "this is the last time he will come to me, I promise you. Go now, go and take the children. Go, go to bed—good night."

As for me, I felt as if I were converted into cold, heavy stone; I could not get my breath. As I stood there immovable my mother seized me by the arm. "Come, Nathanael! do come along!" I suffered myself to be led away; I went into my room. "Be a good boy and keep quiet," mother called after me; "get into bed and go to sleep." But, tortured by indescribable fear and uneasiness, I could not close my eyes. That hateful, hideous Coppelius stood before me with his glittering eyes, smiling maliciously down upon me; in vain did I strive to banish the image. Somewhere about midnight there was a terrific crack, as if a cannon were being fired off. The whole house shook; something went rustling and clattering past my door; the house door was pulled to with a bang. "That is Coppelius," I cried, terror-struck, and leapt out of bed. Then I heard a wild heartrending scream; I rushed into my father's room; the door stood open, and clouds of suffocating smoke came rolling towards me. The maid-servant shouted, "Oh! my master! my master!" On the floor in front of the smoking hearth lay my father, dead, his face burned black and fearfully distorted, my sisters weeping and moaning around him, and my mother lying near them in a swoon. "Coppelius, you atrocious fiend, you've killed my father," I shouted. My senses left me. Two days later, when my father was placed in his coffin, his features were mild and gentle again as they had been when he was alive. I found great consolation in the thought that his association with the diabolical Coppelius could not have ended in his everlasting ruin.

Our neighbours had been awakened by the explosion; the affair got talked about, and came before the magisterial authorities, who wished to cite Coppelius to clear himself. But he had disappeared from the place, leaving no

traces behind him.

Now when I tell you, my dear friend, that the weather glass hawker I spoke of was the villain Coppelius, you will not blame me for seeing impending mischief in his inauspicious reappearance. He was differently dressed; but Coppelius's figure and features are too deeply impressed upon my mind for me to be capable of making a mistake in the matter. Moreover, he has not even changed his name. He proclaims himself here, I learn, to be a Piedmontese mechanician, and styles himself Giuseppe Coppola.

I am resolved to enter the lists against him and revenge my father's death, let the consequences be what they may.

Don't say a word to mother about the reappearance of this odious monster. Give my love to my darling Clara; I will write to her when I am in a somewhat calmer frame of mind. Adieu, &c.

#### CLARA TO NATHANAEL.

You are right, you have not written to me for a very long time, but nevertheless I believe that I still retain a place in your mind and thoughts. It is a proof that you were thinking a good deal about me when you were sending off your last letter to brother Lothair, for instead of directing it to him you directed it to me. With joy I tore open the envelope, and did not perceive the mistake until I read the words, "Oh! my dear, dear Lothair." Now I know I ought not to have read any more of the letter, but ought to have given it to my brother. But as you have so often in innocent raillery made it a sort of reproach against me that I possessed such a calm, and, for a woman, cool-headed temperament that I should be like the woman we read of—if the house was threatening to tumble down, I should, before hastily fleeing, stop to smooth down a crumple in the window curtains—I need hardly tell you that the beginning of your letter quite upset me. I could scarcely breathe; there was a bright mist before my eyes. Oh! my darling Nathanael! what could this terrible thing be that had happened? Separation from you—never to see you again, the thought was like a sharp knife in my heart. I read on and on. Your description of that horrid Coppelius made my flesh creep. I now learnt for the first time what a terrible and violent death your good old father died. Brother Lothair, to whom I handed over his property, sought to comfort me, but with little success. That horrid weather glass hawker Giuseppe Coppola followed me everywhere; and I am almost ashamed to confess it, but

he was able to disturb my sound and in general calm sleep with all sorts of wonderful dream shapes. But soon—the next day—I saw everything in a different light. Oh! do not be angry with me, my best-beloved, if, despite your strange presentiment that Coppelius will do you some mischief, Lothair tells you I am in quite as good spirits, and just the same as ever.

I will frankly confess, it seems to me that all that was fearsome and terrible of which you speak, existed only in your own self, and that the real true outer world had but little to do with it. I can quite admit that old Coppelius may have been highly obnoxious to you children, but your real detestation of him arose from the fact that he hated children.

Naturally enough the gruesome Sand-man of the old nurse's story was associated in your childish mind with old Coppelius, who, even though you had not believed in the Sand-man, would have been to you a ghostly bugbear, especially dangerous to children. His mysterious labours along with your father at night time were, I daresay, nothing more than secret experiments in alchemy, with which your mother could not be over well pleased, owing to the large sums of money that most likely were thrown away upon them; and besides, your father, his mind full of the deceptive striving after higher knowledge, may probably have become rather indifferent to his family, as so often happens in the case of such experimentalists. So also it is equally probable that your father brought about his death by his own imprudence, and that Coppelius is not to blame for it. I must tell you that yesterday I asked our experienced neighbour, the chemist, whether in experiments of this kind an explosion could take place which would have a momentarily fatal effect. He said, "Oh, certainly!" and described to me in his prolix and circumstantial way how it could be occasioned, mentioning at the same time so many strange and funny words that I could not remember them at all. Now I know you will be angry at your Clara, and will say, "Of the Mysterious which often clasps man in its invisible arms there's not a ray can find its way into this cold heart. She sees only the varied surface of the things of the world, and, like the little child, is pleased with the golden glittering fruit; at the kernel of which lies the fatal poison."

Oh! my beloved Nathanael, do you believe then that the intuitive prescience of a dark power working within us to our own ruin cannot exist also in minds which are cheerful, natural, free from care? But please forgive me that I, a simple girl, presume in any way to indicate to you what I really think of such an inward strife. After all, I should not find the proper words,

and you would only laugh at me, not because my thoughts were stupid, but because I was so foolish as to attempt to tell them to you.

If there is a dark and hostile power which traitorously fixes a thread in our hearts in order that, laying hold of it and drawing us by means of it along a dangerous road to ruin, which otherwise we should not have trod—if, I say, there is such a power, it must assume within us a form like ourselves, nay, it must be ourselves; for only in that way can we believe in it, and only so understood do we yield to it so far that it is able to accomplish its secret purpose. So long as we have sufficient firmness, fortified by cheerfulness, to always acknowledge foreign hostile influences for what they really are, whilst we quietly pursue the path pointed out to us by both inclination and calling, then this mysterious power perishes in its futile struggles to attain the form which is to be the reflected image of ourselves. It is also certain, Lothair adds, that if we have once voluntarily given ourselves up to this dark physical power, it often reproduces within us the strange forms which the outer world throws in our way, so that thus it is we ourselves who engender within ourselves the spirit which by some remarkable delusion we imagine to speak in that outer form. It is the phantom of our own self whose intimate relationship with, and whose powerful influence upon our soul either plunges us into hell or elevates us to heaven. Thus you will see, my beloved Nathanael, that I and brother Lothair have well talked over the subject of dark powers and forces; and now, after I have with some difficulty written down the principal results of our discussion, they seem to me to contain many really profound thoughts. Lothair's last words, however, I don't quite understand altogether; I only dimly guess what he means; and yet I cannot help thinking it is all very true, I beg you, dear, strive to forget the ugly advocate Coppelius as well as the weather glass hawker Giuseppe Coppola. Try and convince yourself that these foreign influences can have no power over you, that it is only the belief in their hostile power which can in reality make them dangerous to you. If every line of your letter did not betray the violent excitement of your mind, and if I did not sympathise with your condition from the bottom of my heart, I could in truth jest about the advocate Sand-man and weather glass hawker Coppelius. Pluck up your spirits! Be cheerful! I have resolved to appear to you as your guardian angel if that ugly man Coppola should dare take it into his head to bother you in your dreams, and drive him away with a good hearty laugh. I'm not afraid of him and his nasty hands, not the least little bit; I won't let him either as

advocate spoil any dainty tit-bit I've taken, or as Sand-man rob me of my eyes.

My darling, darling Nathanael,  
Eternally your, &c. &c.

#### NATHANAEL TO LOTHAIR.

I am very sorry that Clara opened and read my last letter to you; of course the mistake is to be attributed to my own absence of mind. She has written me a very deep philosophical letter, proving conclusively that Coppelius and Coppola only exist in my own mind and are phantoms of my own self, which will at once be dissipated, as soon as I look upon them in that light. In very truth one can hardly believe that the mind which so often sparkles in those bright, beautifully smiling, childlike eyes of hers like a sweet lovely dream could draw such subtle and scholastic distinctions. She also mentions your name. You have been talking about me. I suppose you have been giving her lectures, since she sifts and refines everything so acutely. But enough of this! I must now tell you it is most certain that the weather glass hawker Giuseppe Coppola is not the advocate Coppelius. I am attending the lectures of our recently appointed Professor of Physics, who, like the distinguished naturalist,[\[3\]](#) is called Spalanzani, and is of Italian origin. He has known Coppola for many years; and it is also easy to tell from his accent that he really is a Piedmontese. Coppelius was a German, though no honest German, I fancy. Nevertheless I am not quite satisfied. You and Clara will perhaps take me for a gloomy dreamer, but nohow can I get rid of the impression which Coppelius's cursed face made upon me. I am glad to learn from Spalanzani that he has left the town. This Professor Spalanzani is a very queer fish. He is a little fat man, with prominent cheek bones, thin nose, projecting lips, and small piercing eyes. You cannot get a better picture of him than by turning over one of the Berlin pocket almanacs[\[4\]](#) and looking at Cagliostro's[\[5\]](#) portrait engraved by Chodowiecki;[\[6\]](#) Spalanzani looks just like him.

Once lately, as I went up the steps to his house, I perceived that beside the curtain which generally covered a glass door there was a small chink. What it was that excited my curiosity I cannot explain; but I looked through. In the room I saw a female, tall, very slender, but of perfect proportions, and

splendidly dressed, sitting at a little table, on which she had placed both her arms, her hands being folded together. She sat opposite the door, so that I could easily see her angelically beautiful face. She did not appear to notice me, and there was moreover a strangely fixed look about her eyes, I might almost say they appeared as if they had no power of vision; I thought she was sleeping with her eyes open. I felt quite uncomfortable, and so I slipped away quietly into the Professor's lecture room, which was close at hand. Afterwards I learnt that the figure which I had seen was Spalanzani's daughter, Olimpia, whom he keeps locked in a most wicked and unaccountable way, and no man is ever allowed to come near her. Perhaps, however, there is after all, something peculiar about her; perhaps she's an idiot or something of that sort. But why am I telling you all this? I could have told you it all better and more in detail when I see you. For in a fortnight I shall be amongst you. I must see my dear sweet angel, my Clara, again. Then the little bit of ill-temper, which, I must confess, took possession of me after her fearfully sensible letter, will be blown away. And that is the reason why I am not writing to her as well today. With all best wishes, &c.

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Nothing more strange and extraordinary can be imagined, gracious reader, than what happened to my poor friend, the young student Nathanael, and which I have undertaken to relate to you. Have you ever lived to experience anything that completely took possession of your heart and mind and thoughts to the utter exclusion of everything else? All was seething and boiling within you; your blood, heated to fever pitch, leapt through your veins and inflamed your cheeks. Your gaze was so peculiar, as if seeking to grasp in empty space forms not seen of any other eye, and all your words ended in sighs betokening some mystery. Then your friends asked you, "What is the matter with you, my dear friend? What do you see?" And, wishing to describe the inner pictures in all their vivid colours, with their lights and their shades, you in vain struggled to find words with which to express yourself. But you felt as if you must gather up all the events that had happened, wonderful, splendid, terrible, jocose, and awful, in the very first word, so that the whole might be revealed by a single electric discharge, so to speak. Yet every word and all that partook of the nature of communication by intelligible sounds seemed to be colourless, cold, and dead. Then you try and

try again, and stutter and stammer, whilst your friends' prosy questions strike like icy winds upon your heart's hot fire until they extinguish it. But if, like a bold painter, you had first sketched in a few audacious strokes the outline of the picture you had in your soul, you would then easily have been able to deepen and intensify the colours one after the other, until the varied throng of living figures carried your friends away, and they, like you, saw themselves in the midst of the scene that had proceeded out of your own soul.

Strictly speaking, indulgent reader, I must indeed confess to you, nobody has asked me for the history of young Nathanael; but you are very well aware that I belong to that remarkable class of authors who, when they are bearing anything about in their minds in the manner I have just described, feel as if everybody who comes near them, and also the whole world to boot, were asking, "Oh! what is it? Oh! do tell us, my good sir?" Hence I was most powerfully impelled to narrate to you Nathanael's ominous life. My soul was full of the elements of wonder and extraordinary peculiarity in it; but, for this very reason, and because it was necessary in the very beginning to dispose you, indulgent reader, to bear with what is fantastic—and that is not a little thing—I racked my brain to find a way of commencing the story in a significant and original manner, calculated to arrest your attention. To begin with "Once upon a time," the best beginning for a story, seemed to me too tame; with "In the small country town S—— lived," rather better, at any rate allowing plenty of room to work up to the climax; or to plunge at once *in medias res*, "'Go to the devil!' cried the student Nathanael, his eyes blazing wildly with rage and fear, when the weather glass hawker Giuseppe Coppola"—well, that is what I really had written, when I thought I detected something of the ridiculous in Nathanael's wild glance; and the history is anything but laughable. I could not find any words which seemed fitted to reflect in even the feeblest degree the brightness of the colours of my mental vision. I determined not to begin at all. So I pray you, gracious reader, accept the three letters which my friend Lothair has been so kind as to communicate to me as the outline of the picture, into which I will endeavour to introduce more and more colour as I proceed with my narrative. Perhaps, like a good portrait painter, I may succeed in depicting more than one figure in such wise that you will recognise it as a good likeness without being acquainted with the original, and feel as if you had very often seen the original with your own bodily eyes. Perhaps, too, you will then believe that nothing is more wonderful, nothing more fantastic than real life, and that all that a writer can



do is to present it as a dark reflection from a dim cut mirror.

In order to make the very commencement more intelligible, it is necessary to add to the letters that, soon after the death of Nathanael's father, Clara and Lothair, the children of a distant relative, who had likewise died, leaving them orphans, were taken by Nathanael's mother into her own house. Clara and Nathanael conceived a warm affection for each other, against which not the slightest objection in the world could be urged. When therefore Nathanael left home to prosecute his studies in G——, they were betrothed. It is from G—— that his last letter is written, where he is attending the lectures of Spalanzani, the distinguished Professor of Physics.

I might now proceed comfortably with my narration, did not at this moment Clara's image rise up so vividly before my eyes that I cannot turn them away from it, just as I never could when she looked upon me and smiled so sweetly. Nowhere would she have passed for beautiful; that was the unanimous opinion of all who professed to have any technical knowledge of beauty. But whilst architects praised the pure proportions of her figure and form, painters averred that her neck, shoulders, and bosom were almost too chastely modelled, and yet, on the other hand, one and all were in love with her glorious Magdalene hair, and talked a good deal of nonsense about Battoni-like[7] colouring. One of them, a veritable romanticist, strangely enough likened her eyes to a lake by Ruisdael,[8] in which is reflected the pure azure of the cloudless sky, the beauty of woods and flowers, and all the bright and varied life of a living landscape. Poets and musicians went still further and said, "What's all this talk about seas and reflections? How can we look upon the girl without feeling that wonderful heavenly songs and melodies beam upon us from her eyes, penetrating deep down into our hearts, till all becomes awake and throbbing with emotion? And if we cannot sing anything at all passable then, why, we are not worth much; and this we can also plainly read in the rare smile which flits around her lips when we have the hardihood to squeak out something in her presence which we pretend to call singing, in spite of the fact that it is nothing more than a few single notes confusedly linked together." And it really was so. Clara had the powerful fancy of a bright, innocent, unaffected child, a woman's deep and sympathetic heart, and an understanding clear, sharp, and discriminating. Dreamers and visionaries had but a bad time of it with her; for without saying very much—she was not by nature of a talkative disposition—she plainly asked, by her calm steady look, and rare ironical smile, "How can you imagine, my dear

friends, that I can take these fleeting shadowy images for true living and breathing forms?" For this reason many found fault with her as being cold, prosaic, and devoid of feeling; others, however, who had reached a clearer and deeper conception of life, were extremely fond of the intelligent, childlike, large-hearted girl. But none had such an affection for her as Nathanael, who was a zealous and cheerful cultivator of the fields of science and art. Clara clung to her lover with all her heart; the first clouds she encountered in life were when he had to separate from her. With what delight did she fly into his arms when, as he had promised in his last letter to Lothair, he really came back to his native town and entered his mother's room! And as Nathanael had foreseen, the moment he saw Clara again he no longer thought about either the advocate Coppelius or her sensible letter; his ill-humour had quite disappeared.

Nevertheless Nathanael was right when he told his friend Lothair that the repulsive vendor of weather glasses, Coppola, had exercised a fatal and disturbing influence upon his life. It was quite patent to all; for even during the first few days he showed that he was completely and entirely changed. He gave himself up to gloomy reveries, and moreover acted so strangely; they had never observed anything at all like it in him before. Everything, even his own life, was to him but dreams and presentiments. His constant theme was that every man who delusively imagined himself to be free was merely the plaything of the cruel sport of mysterious powers, and it was vain for man to resist them; he must humbly submit to whatever destiny had decreed for him. He went so far as to maintain that it was foolish to believe that a man could do anything in art or science of his own accord; for the inspiration in which alone any true artistic work could be done did not proceed from the spirit within outwards, but was the result of the operation directed inwards of some Higher Principle existing without and beyond ourselves.

This mystic extravagance was in the highest degree repugnant to Clara's clear intelligent mind, but it seemed vain to enter upon any attempt at refutation. Yet when Nathanael went on to prove that Coppelius was the Evil Principle which had entered into him and taken possession of him at the time he was listening behind the curtain, and that this hateful demon would in some terrible way ruin their happiness, then Clara grew grave and said, "Yes, Nathanael. You are right; Coppelius is an Evil Principle; he can do dreadful things, as bad as could a Satanic power which should assume a living physical form, but only—only if you do not banish him from your mind and

thoughts. So long as you believe in him he exists and is at work; your belief in him is his only power." Whereupon Nathanael, quite angry because Clara would only grant the existence of the demon in his own mind, began to dilate at large upon the whole mystic doctrine of devils and awful powers, but Clara abruptly broke off the theme by making, to Nathanael's very great disgust, some quite commonplace remark. Such deep mysteries are sealed books to cold, unsusceptible characters, he thought, without being clearly conscious to himself that he counted Clara amongst these inferior natures, and accordingly he did not remit his efforts to initiate her into these mysteries. In the morning, when she was helping to prepare breakfast, he would take his stand beside her, and read all sorts of mystic books to her, until she begged him—"But, my dear Nathanael, I shall have to scold you as the Evil Principle which exercises a fatal influence upon my coffee. For if I do as you wish, and let things go their own way, and look into your eyes whilst you read, the coffee will all boil over into the fire, and you will none of you get any breakfast." Then Nathanael hastily banged the book to and ran away in great displeasure to his own room.

Formerly he had possessed a peculiar talent for writing pleasing, sparkling tales, which Clara took the greatest delight in listening to; but now his productions were gloomy, unintelligible, and wanting in form, so that, although Clara out of forbearance towards him did not say so, he nevertheless felt how very little interest she took in them. There was nothing that Clara disliked so much as what was tedious; at such times her intellectual sleepiness was not to be overcome; it was betrayed both in her glances and in her words. Nathanael's effusions were, in truth, exceedingly tedious. His ill-humour at Clara's cold prosaic temperament continued to increase; Clara could not conceal her distaste of his dark, gloomy, wearying mysticism; and thus both began to be more and more estranged from each other without exactly being aware of it themselves. The image of the ugly Coppelius had, as Nathanael was obliged to confess to himself, faded considerably in his fancy, and it often cost him great pains to present him in vivid colours in his literary efforts, in which he played the part of the ghoul of Destiny. At length it entered into his head to make his dismal presentiment that Coppelius would ruin his happiness the subject of a poem. He made himself and Clara, united by true love, the central figures, but represented a black hand as being from time to time thrust into their life and plucking out a joy that had blossomed for them. At length, as they were standing at the altar, the terrible Coppelius

appeared and touched Clara's lovely eyes, which leapt into Nathanael's own bosom, burning and hissing like bloody sparks. Then Coppelius laid hold upon him, and hurled him into a blazing circle of fire, which spun round with the speed of a whirlwind, and, storming and blustering, dashed away with him. The fearful noise it made was like a furious hurricane lashing the foaming sea-waves until they rise up like black, white-headed giants in the midst of the raging struggle. But through the midst of the savage fury of the tempest he heard Clara's voice calling, "Can you not see me, dear? Coppelius has deceived you; they were not my eyes which burned so in your bosom; they were fiery drops of your own heart's blood. Look at me, I have got my own eyes still." Nathanael thought, "Yes, that is Clara, and I am hers forever." Then this thought laid a powerful grasp upon the fiery circle so that it stood still, and the riotous turmoil died away rumbling down a dark abyss. Nathanael looked into Clara's eyes; but it was death whose gaze rested so kindly upon him.

Whilst Nathanael was writing this work he was very quiet and sober-minded; he filed and polished every line, and as he had chosen to submit himself to the limitations of metre, he did not rest until all was pure and musical. When, however, he had at length finished it and read it aloud to himself he was seized with horror and awful dread, and he screamed, "Whose hideous voice is this?" But he soon came to see in it again nothing beyond a very successful poem, and he confidently believed it would enkindle Clara's cold temperament, though to what end she should be thus aroused was not quite clear to his own mind, nor yet what would be the real purpose served by tormenting her with these dreadful pictures, which prophesied a terrible and ruinous end to her affection.

Nathanael and Clara sat in his mother's little garden. Clara was bright and cheerful, since for three entire days her lover, who had been busy writing his poem, had not teased her with his dreams or forebodings. Nathanael, too, spoke in a gay and vivacious way of things of merry import, as he formerly used to do, so that Clara said, "Ah! now I have you again. We have driven away that ugly Coppelius, you see." Then it suddenly occurred to him that he had got the poem in his pocket which he wished to read to her. He at once took out the manuscript and began to read. Clara, anticipating something tedious as usual, prepared to submit to the infliction, and calmly resumed her knitting. But as the sombre clouds rose up darker and darker she let her knitting fall on her lap and sat with her eyes fixed in a set stare upon

Nathanael's face. He was quite carried away by his own work, the fire of enthusiasm coloured his cheeks a deep red, and tears started from his eyes. At length he concluded, groaning and showing great lassitude; grasping Clara's hand, he sighed as if he were being utterly melted in inconsolable grief, "Oh! Clara! Clara!" She drew him softly to her heart and said in a low but very grave and impressive tone, "Nathanael, my darling Nathanael, throw that foolish, senseless, stupid thing into the fire." Then Nathanael leapt indignantly to his feet, crying, as he pushed Clara from him, "You damned lifeless automaton!" and rushed away. Clara was cut to the heart, and wept bitterly. "Oh! he has never loved me, for he does not understand me," she sobbed.

Lothair entered the arbour. Clara was obliged to tell him all that had taken place. He was passionately fond of his sister; and every word of her complaint fell like a spark upon his heart, so that the displeasure which he had long entertained against his dreamy friend Nathanael was kindled into furious anger. He hastened to find Nathanael, and upbraided him in harsh words for his irrational behaviour towards his beloved sister. The fiery Nathanael answered him in the same style. "A fantastic, crack-brained fool," was retaliated with, "A miserable, common, everyday sort of fellow." A meeting was the inevitable consequence. They agreed to meet on the following morning behind the garden wall, and fight, according to the custom of the students of the place, with sharp rapiers. They went about silent and gloomy; Clara had both heard and seen the violent quarrel, and also observed the fencing master bring the rapiers in the dusk of the evening. She had a presentiment of what was to happen. They both appeared at the appointed place wrapped up in the same gloomy silence, and threw off their coats. Their eyes flaming with the bloodthirsty light of pugnacity, they were about to begin their contest when Clara burst through the garden door. Sobbing, she screamed, "You savage, terrible men! Cut me down before you attack each other; for how can I live when my lover has slain my brother, or my brother slain my lover?" Lothair let his weapon fall and gazed silently upon the ground, whilst Nathanael's heart was rent with sorrow, and all the affection which he had felt for his lovely Clara in the happiest days of her golden youth was awakened within him. His murderous weapon, too, fell from his hand; he threw himself at Clara's feet. "Oh! can you ever forgive me, my only, my dearly loved Clara? Can you, my dear brother Lothair, also forgive me?" Lothair was touched by his friend's great distress; the three young people

embraced each other amidst endless tears, and swore never again to break their bond of love and fidelity.

Nathanael felt as if a heavy burden that had been weighing him down to the earth was now rolled from off him, nay, as if by offering resistance to the dark power which had possessed him, he had rescued his own self from the ruin which had threatened him. Three happy days he now spent amidst the loved ones, and then returned to G——, where he had still a year to stay before settling down in his native town for life.

Everything having reference to Coppelius had been concealed from the mother, for they knew she could not think of him without horror, since she as well as Nathanael believed him to be guilty of causing her husband's death.

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When Nathanael came to the house where he lived he was greatly astonished to find it burnt down to the ground, so that nothing but the bare outer walls were left standing amidst a heap of ruins. Although the fire had broken out in the laboratory of the chemist who lived on the ground floor, and had therefore spread upwards, some of Nathanael's bold, active friends had succeeded in time in forcing a way into his room in the upper storey and saving his books and manuscripts and instruments. They had carried them all uninjured into another house, where they engaged a room for him; this he now at once took possession of. That he lived opposite Professor Spalanzani did not strike him particularly, nor did it occur to him as anything more singular that he could, as he observed, by looking out of his window, see straight into the room where Olimpia often sat alone. Her figure he could plainly distinguish, although her features were uncertain and confused. It did at length occur to him, however, that she remained for hours together in the same position in which he had first discovered her through the glass door, sitting at a little table without any occupation whatever, and it was evident that she was constantly gazing across in his direction. He could not but confess to himself that he had never seen a finer figure. However, with Clara mistress of his heart, he remained perfectly unaffected by Olimpia's stiffness and apathy; and it was only occasionally that he sent a fugitive glance over his compendium across to her—that was all.

He was writing to Clara; a light tap came at the door. At his summons to "Come in," Coppola's repulsive face appeared peeping in. Nathanael felt

his heart beat with trepidation; but, recollecting what Spalanzani had told him about his fellow countryman Coppola, and what he had himself so faithfully promised his beloved in respect to the Sand-man Coppelius, he was ashamed at himself for this childish fear of spectres. Accordingly, he controlled himself with an effort, and said, as quietly and as calmly as he possibly could, "I don't want to buy any weather glasses, my good friend; you had better go elsewhere." Then Coppola came right into the room, and said in a hoarse voice, screwing up his wide mouth into a hideous smile, whilst his little eyes flashed keenly from beneath his long grey eyelashes, "What! Nee weather gless? Nee weather gless? 've got foine oyes as well—foine oyes!" Affrighted, Nathanael cried, "You stupid man, how can you have eyes?—eyes—eyes?" But Coppola, laying aside his weather glasses, thrust his hands into his big coat pockets and brought out several spy glasses and spectacles, and put them on the table. "Theer! Theer! Spect'cles! Spect'cles to put 'n nose! Them's my oyes—foine oyes." And he continued to produce more and more spectacles from his pockets until the table began to gleam and flash all over. Thousands of eyes were looking and blinking convulsively, and staring up at Nathanael; he could not avert his gaze from the table. Coppola went on heaping up his spectacles, whilst wilder and ever wilder burning flashes crossed through and through each other and darted their blood-red rays into Nathanael's breast. Quite overcome, and frantic with terror, he shouted, "Stop! stop! you terrible man!" and he seized Coppola by the arm, which he had again thrust into his pocket in order to bring out still more spectacles, although the whole table was covered all over with them. With a harsh disagreeable laugh Coppola gently freed himself; and with the words "So! went none! Well, here foine gless!" he swept all his spectacles together, and put them back into his coat pockets, whilst from a breast pocket he produced a great number of larger and smaller perspectives. As soon as the spectacles were gone Nathanael recovered his equanimity again; and, bending his thoughts upon Clara, he clearly discerned that the gruesome incubus had proceeded only from himself, as also that Coppola was a right honest mechanic and optician, and far from being Coppelius's dreaded double and ghost. And then, besides, none of the glasses which Coppola now placed on the table had anything at all singular about them, at least nothing so weird as the spectacles; so, in order to square accounts with himself, Nathanael now really determined to buy something of the man. He took up a small, very beautifully cut pocket perspective, and by way of proving it looked through

the window. Never before in his life had he had a glass in his hands that brought out things so clearly and sharply and distinctly. Involuntarily he directed the glass upon Spalanzani's room; Olimpia sat at the little table as usual, her arms laid upon it and her hands folded. Now he saw for the first time the regular and exquisite beauty of her features. The eyes, however, seemed to him to have a singular look of fixity and lifelessness. But as he continued to look closer and more carefully through the glass he fancied a light like humid moonbeams came into them. It seemed as if their power of vision was now being enkindled; their glances shone with ever increasing vivacity. Nathanael remained standing at the window as if glued to the spot by a wizard's spell, his gaze rivetted unchangeably upon the divinely beautiful Olimpia. A coughing and shuffling of the feet awakened him out of his enchaining dream, as it were. Coppola stood behind him, "Tre zechini" (three ducats). Nathanael had completely forgotten the optician; he hastily paid the sum demanded. "Ain't 't? Foine gless? foine gless?" asked Coppola in his harsh unpleasant voice, smiling sardonically. "Yes, yes, yes," rejoined Nathanael impatiently; "adieu, my good friend." But Coppola did not leave the room without casting many peculiar side glances upon Nathanael; and the young student heard him laughing loudly on the stairs. "Ah well!" thought he, "he's laughing at me because I've paid him too much for this little perspective—because I've given him too much money—that's it." As he softly murmured these words he fancied he detected a gasping sigh as of a dying man stealing awfully through the room; his heart stopped beating with fear. But to be sure he had heaved a deep sigh himself; it was quite plain. "Clara is quite right," said he to himself, "in holding me to be an incurable ghost-seer; and yet it's very ridiculous—ay, more than ridiculous, that the stupid thought of having paid Coppola too much for his glass should cause me this strange anxiety; I can't see any reason for it."

Now he sat down to finish his letter to Clara; but a glance through the window showed him Olimpia still in her former posture. Urged by an irresistible impulse he jumped up and seized Coppola's perspective; nor could he tear himself away from the fascinating Olimpia until his friend and brother Siegmund called for him to go to Professor Spalanzani's lecture. The curtains before the door of the all-important room were closely drawn, so that he could not see Olimpia. Nor could he even see her from his own room during the two following days, notwithstanding that he scarcely ever left his window, and maintained a scarce interrupted watch through Coppola's



perspective upon her room. On the third day curtains even were drawn across the window. Plunged into the depths of despair,—goaded by longing and ardent desire, he hurried outside the walls of the town. Olimpia's image hovered about his path in the air and stepped forth out of the bushes, and peeped up at him with large and lustrous eyes from the bright surface of the brook. Clara's image was completely faded from his mind; he had no thoughts except for Olimpia. He uttered his love-plaints aloud and in a lachrymose tone, "Oh! my glorious, noble star of love, have you only risen to vanish again, and leave me in the darkness and hopelessness of night?"

Returning home, he became aware that there was a good deal of noisy bustle going on in Spalanzani's house. All the doors stood wide open; men were taking in all kinds of gear and furniture; the windows of the first floor were all lifted off their hinges; busy maid-servants with immense hair brooms were driving backwards and forwards dusting and sweeping, whilst within could be heard the knocking and hammering of carpenters and upholsterers. Utterly astonished, Nathanael stood still in the street; then Siegmund joined him, laughing, and said, "Well, what do you say to our old Spalanzani?" Nathanael assured him that he could not say anything, since he knew not what it all meant; to his great astonishment, he could hear, however, that they were turning the quiet gloomy house almost inside out with their dusting and cleaning and making of alterations. Then he learned from Siegmund that Spalanzani intended giving a great concert and ball on the following day, and that half the university was invited. It was generally reported that Spalanzani was going to let his daughter Olimpia, whom he had so long so jealously guarded from every eye, make her first appearance.

Nathanael received an invitation. At the appointed hour, when the carriages were rolling up and the lights were gleaming brightly in the decorated halls, he went across to the Professor's, his heart beating high with expectation. The company was both numerous and brilliant. Olimpia was richly and tastefully dressed. One could not but admire her figure and the regular beauty of her features. The striking inward curve of her back, as well as the wasp-like smallness of her waist, appeared to be the result of too-tight lacing. There was something stiff and measured in her gait and bearing that made an unfavourable impression upon many; it was ascribed to the constraint imposed upon her by the company. The concert began. Olimpia played on the piano with great skill; and sang as skilfully an *aria di bravura*, in a voice which was, if anything, almost too sharp, but clear as glass bells.

Nathanael was transported with delight; he stood in the background farthest from her, and owing to the blinding lights could not quite distinguish her features. So, without being observed, he took Coppola's glass out of his pocket, and directed it upon the beautiful Olimpia. Oh! then he perceived how her yearning eyes sought him, how every note only reached its full purity in the loving glance which penetrated to and inflamed his heart. Her artificial *roulades* seemed to him to be the exultant cry towards heaven of the soul refined by love; and when at last, after the *cadenza*, the long trill rang shrilly and loudly through the hall, he felt as if he were suddenly grasped by burning arms and could no longer control himself,—he could not help shouting aloud in his mingled pain and delight, "Olimpia!" All eyes were turned upon him; many people laughed. The face of the cathedral organist wore a still more gloomy look than it had done before, but all he said was, "Very well!"

The concert came to an end, and the ball began. Oh! to dance with her—with her—that was now the aim of all Nathanael's wishes, of all his desires. But how should he have courage to request her, the queen of the ball, to grant him the honour of a dance? And yet he couldn't tell how it came about, just as the dance began, he found himself standing close beside her, nobody having as yet asked her to be his partner; so, with some difficulty stammering out a few words, he grasped her hand. It was cold as ice; he shook with an awful, frosty shiver. But, fixing his eyes upon her face, he saw that her glance was beaming upon him with love and longing, and at the same moment he thought that the pulse began to beat in her cold hand, and the warm life-blood to course through her veins. And passion burned more intensely in his own heart also; he threw his arm round her beautiful waist and whirled her round the hall. He had always thought that he kept good and accurate time in dancing, but from the perfectly rhythmical evenness with which Olimpia danced, and which frequently put him quite out, he perceived how very faulty his own time really was. Notwithstanding, he would not dance with any other lady; and everybody else who approached Olimpia to call upon her for a dance, he would have liked to kill on the spot. This, however, only happened twice; to his astonishment Olimpia remained after this without a partner, and he failed not on each occasion to take her out again. If Nathanael had been able to see anything else except the beautiful Olimpia, there would inevitably have been a good deal of unpleasant quarrelling and strife; for it was evident that Olimpia was the object of the

smothered laughter only with difficulty suppressed, which was heard in various corners amongst the young people; and they followed her with very curious looks, but nobody knew for what reason. Nathanael, excited by dancing and the plentiful supply of wine he had consumed, had laid aside the shyness which at other times characterised him. He sat beside Olimpia, her hand in his own, and declared his love enthusiastically and passionately in words which neither of them understood, neither he nor Olimpia. And yet she perhaps did, for she sat with her eyes fixed unchangeably upon his, sighing repeatedly, "Ach! Ach! Ach!" Upon this Nathanael would answer, "Oh, you glorious heavenly lady! You ray from the promised paradise of love! Oh! what a profound soul you have! my whole being is mirrored in it!" and a good deal more in the same strain. But Olimpia only continued to sigh "Ach! Ach!" again and again.

Professor Spalanzani passed by the two happy lovers once or twice, and smiled with a look of peculiar satisfaction. All at once it seemed to Nathanael, albeit he was far away in a different world, as if it were growing perceptibly darker down below at Professor Spalanzani's. He looked about him, and to his very great alarm became aware that there were only two lights left burning in the hall, and they were on the point of going out. The music and dancing had long ago ceased. "We must part—part!" he cried, wildly and despairingly; he kissed Olimpia's hand; he bent down to her mouth, but ice-cold lips met his burning ones. As he touched her cold hand, he felt his heart thrilled with awe; the legend of "The Dead Bride"[\[9\]](#) shot suddenly through his mind. But Olimpia had drawn him closer to her, and the kiss appeared to warm her lips into vitality. Professor Spalanzani strode slowly through the empty apartment, his footsteps giving a hollow echo; and his figure had, as the flickering shadows played about him, a ghostly, awful appearance. "Do you love me? Do you love me, Olimpia? Only one little word—Do you love me?" whispered Nathanael, but she only sighed, "Ach! Ach!" as she rose to her feet. "Yes, you are my lovely, glorious star of love," said Nathanael, "and will shine forever, purifying and ennobling my heart" "Ach! Ach!" replied Olimpia, as she moved along. Nathanael followed her; they stood before the Professor. "You have had an extraordinarily animated conversation with my daughter," said he, smiling; "well, well, my dear Mr. Nathanael, if you find pleasure in talking to the stupid girl, I am sure I shall be glad for you to come and do so." Nathanael took his leave, his heart singing and leaping in a perfect delirium of happiness.

During the next few days Spalanzani's ball was the general topic of conversation. Although the Professor had done everything to make the thing a splendid success, yet certain gay spirits related more than one thing that had occurred which was quite irregular and out of order. They were especially keen in pulling Olimpia to pieces for her taciturnity and rigid stiffness; in spite of her beautiful form they alleged that she was hopelessly stupid, and in this fact they discerned the reason why Spalanzani had so long kept her concealed from publicity. Nathanael heard all this with inward wrath, but nevertheless he held his tongue; for, thought he, would it indeed be worth while to prove to these fellows that it is their own stupidity which prevents them from appreciating Olimpia's profound and brilliant parts? One day Siegmund said to him, "Pray, brother, have the kindness to tell me how you, a sensible fellow, came to lose your head over that Miss Wax Face—that wooden doll across there?" Nathanael was about to fly into a rage, but he recollected himself and replied, "Tell me, Siegmund, how came it that Olimpia's divine charms could escape your eye, so keenly alive as it always is to beauty, and your acute perception as well? But Heaven be thanked for it, otherwise I should have had you for a rival, and then the blood of one of us would have had to be spilled." Siegmund, perceiving how matters stood with his friend, skilfully interposed and said, after remarking that all argument with one in love about the object of his affections was out of place, "Yet it's very strange that several of us have formed pretty much the same opinion about Olimpia. We think she is—you won't take it ill, brother?—that she is singularly statuesque and soulless. Her figure is regular, and so are her features, that can't be gainsaid; and if her eyes were not so utterly devoid of life, I may say, of the power of vision, she might pass for a beauty. She is strangely measured in her movements, they all seem as if they were dependent upon some wound-up clockwork. Her playing and singing has the disagreeably perfect, but insensitive time of a singing machine, and her dancing is the same. We felt quite afraid of this Olimpia, and did not like to have anything to do with her; she seemed to us to be only acting like a living creature, and as if there was some secret at the bottom of it all." Nathanael did not give way to the bitter feelings which threatened to master him at these words of Siegmund's; he fought down and got the better of his displeasure, and merely said, very earnestly, "You cold prosaic fellows may very well be afraid of her. It is only to its like that the poetically organised spirit unfolds itself. Upon me alone did her loving glances fall, and through my mind and

thoughts alone did they radiate; and only in her love can I find my own self again. Perhaps, however, she doesn't do quite right not to jabber a lot of nonsense and stupid talk like other shallow people. It is true, she speaks but few words; but the few words she does speak are genuine hieroglyphs of the inner world of Love and of the higher cognition of the intellectual life revealed in the intuition of the Eternal beyond the grave. But you have no understanding for all these things, and I am only wasting words." "God be with you, brother," said Siegmund very gently, almost sadly, "but it seems to me that you are in a very bad way. You may rely upon me, if all—No, I can't say any more." It all at once dawned upon Nathanael that his cold prosaic friend Siegmund really and sincerely wished him well, and so he warmly shook his proffered hand.

Nathanael had completely forgotten that there was a Clara in the world, whom he had once loved—and his mother and Lothair. They had all vanished from his mind; he lived for Olympia alone. He sat beside her every day for hours together, rhapsodising about his love and sympathy enkindled into life, and about psychic elective affinity[10]—all of which Olympia listened to with great reverence. He fished up from the very bottom of his desk all the things that he had ever written—poems, fancy sketches, visions, romances, tales, and the heap was increased daily with all kinds of aimless sonnets, stanzas, canzonets. All these he read to Olympia hour after hour without growing tired; but then he had never had such an exemplary listener. She neither embroidered, nor knitted; she did not look out of the window, or feed a bird, or play with a little pet dog or a favourite cat, neither did she twist a piece of paper or anything of that kind round her finger; she did not forcibly convert a yawn into a low affected cough—in short, she sat hour after hour with her eyes bent unchangeably upon her lover's face, without moving or altering her position, and her gaze grew more ardent and more ardent still. And it was only when at last Nathanael rose and kissed her lips or her hand that she said, "Ach! Ach!" and then "Good night, dear." Arrived in his own room, Nathanael would break out with, "Oh! what a brilliant—what a profound mind! Only you—you alone understand me." And his heart trembled with rapture when he reflected upon the wondrous harmony which daily revealed itself between his own and his Olympia's character; for he fancied that she had expressed in respect to his works and his poetic genius the identical sentiments which he himself cherished deep down in his own heart in respect to the same, and even as if it was his own heart's voice speaking to him. And

it must indeed have been so; for Olimpia never uttered any other words than those already mentioned. And when Nathanael himself in his clear and sober moments, as, for instance, directly after waking in a morning, thought about her utter passivity and taciturnity, he only said, "What are words—but words? The glance of her heavenly eyes says more than any tongue of earth. And how can, anyway, a child of heaven accustom herself to the narrow circle which the exigencies of a wretched mundane life demand?"

Professor Spalanzani appeared to be greatly pleased at the intimacy that had sprung up between his daughter Olimpia and Nathanael, and showed the young man many unmistakable proofs of his good feeling towards him; and when Nathanael ventured at length to hint very delicately at an alliance with Olimpia, the Professor smiled all over his face at once, and said he should allow his daughter to make a perfectly free choice. Encouraged by these words, and with the fire of desire burning in his heart, Nathanael resolved the very next day to implore Olimpia to tell him frankly, in plain words, what he had long read in her sweet loving glances,—that she would be his forever. He looked for the ring which his mother had given him at parting; he would present it to Olimpia as a symbol of his devotion, and of the happy life he was to lead with her from that time onwards. Whilst looking for it he came across his letters from Clara and Lothair; he threw them carelessly aside, found the ring, put it in his pocket, and ran across to Olimpia. Whilst still on the stairs, in the entrance-passage, he heard an extraordinary hubbub; the noise seemed to proceed from Spalanzani's study. There was a stamping—a rattling—pushing—knocking against the door, with curses and oaths intermingled. "Leave hold—leave hold—you monster—you rascal—staked your life and honour upon it?—Ha! ha! ha! ha!—That was not our wager—I, I made the eyes—I the clockwork.—Go to the devil with your clockwork—you damned dog of a watch maker—be off—Satan—stop—you paltry turner—you infernal beast!—stop—begone—let me go." The voices which were thus making all this racket and rumpus were those of Spalanzani and the fearsome Coppelius. Nathanael rushed in, impelled by some nameless dread. The Professor was grasping a female figure by the shoulders, the Italian Coppola held her by the feet; and they were pulling and dragging each other backwards and forwards, fighting furiously to get possession of her. Nathanael recoiled with horror on recognising that the figure was Olimpia. Boiling with rage, he was about to tear his beloved from the grasp of the madmen, when Coppola by an extraordinary exertion of strength twisted the

figure out of the Professor's hands and gave him such a terrible blow with her, that he reeled backwards and fell over the table all amongst the phials and retorts, the bottles and glass cylinders, which covered it: all these things were smashed into a thousand pieces. But Coppola threw the figure across his shoulder, and, laughing shrilly and horribly, ran hastily down the stairs, the figure's ugly feet hanging down and banging and rattling like wood against the steps. Nathanael was stupefied;—he had seen only too distinctly that in Olimpia's pallid waxed face there were no eyes, merely black holes in their stead; she was an inanimate puppet. Spalanzani was rolling on the floor; the pieces of glass had cut his head and breast and arm; the blood was escaping from him in streams. But he gathered his strength together by an effort.

"After him—after him! What do you stand staring there for? Coppelius—Coppelius—he's stolen my best automaton—at which I've worked for twenty years—staked my life upon it—the clockwork—speech—movement—mine—your eyes—stolen your eyes—damn him—curse him—after him—fetch me back Olimpia—there are the eyes." And now Nathanael saw a pair of bloody eyes lying on the floor staring at him; Spalanzani seized them with his uninjured hand and threw them at him, so that they hit his breast. Then madness dug her burning talons into him and swept down into his heart, rending his mind and thoughts to shreds. "Aha! aha! aha! Fire wheel—fire wheel! Spin round, fire wheel! merrily, merrily! Aha! wooden doll! spin round, pretty wooden doll!" and he threw himself upon the Professor, clutching him fast by the throat. He would certainly have strangled him had not several people, attracted by the noise, rushed in and torn away the madman; and so they saved the Professor, whose wounds were immediately dressed. Siegmund, with all his strength, was not able to subdue the frantic lunatic, who continued to scream in a dreadful way, "Spin round, wooden doll!" and to strike out right and left with his doubled fists. At length the united strength of several succeeded in overpowering him by throwing him on the floor and binding him. His cries passed into a brutish bellow that was awful to hear; and thus raging with the harrowing violence of madness, he was taken away to the madhouse.

Before continuing my narration of what happened further to the unfortunate Nathanael, I will tell you, indulgent reader, in case you take any interest in that skilful mechanic and fabricator of automata, Spalanzani, that he recovered completely from his wounds. He had, however, to leave the university, for Nathanael's fate had created a great sensation; and the opinion

was pretty generally expressed that it was an imposture altogether unpardonable to have smuggled a wooden puppet instead of a living person into intelligent tea circles,—for Olympia had been present at several with success. Lawyers called it a cunning piece of knavery, and all the harder to punish since it was directed against the public; and it had been so craftily contrived that it had escaped unobserved by all except a few preternaturally acute students, although everybody was very wise now and remembered to have thought of several facts which occurred to them as suspicious. But these latter could not succeed in making out any sort of a consistent tale. For was it, for instance, a thing likely to occur to any one as suspicious that, according to the declaration of an elegant beau of these tea parties, Olympia had, contrary to all good manners, sneezed oftener than she had yawned? The former must have been, in the opinion of this elegant gentleman, the winding up of the concealed clockwork; it had always been accompanied by an observable creaking, and so on. The Professor of Poetry and Eloquence took a pinch of snuff, and, slapping the lid to and clearing his throat, said solemnly, "My most honourable ladies and gentlemen, don't you see then where the rub is? The whole thing is an allegory, a continuous metaphor. You understand me? *Sapienti sat.*" But several most honourable gentlemen did not rest satisfied with this explanation; the history of this automaton had sunk deeply into their souls, and an absurd mistrust of human figures began to prevail. Several lovers, in order to be fully convinced that they were not paying court to a wooden puppet, required that their mistress should sing and dance a little out of time, should embroider or knit or play with her little pug, &c., when being read to, but above all things else that she should do something more than merely listen—that she should frequently speak in such a way as to really show that her words presupposed as a condition some thinking and feeling. The bonds of love were in many cases drawn closer in consequence, and so of course became more engaging; in other instances they gradually relaxed and fell away. "I cannot really be made responsible for it," was the remark of more than one young gallant. At the tea gatherings everybody, in order to ward off suspicion, yawned to an incredible extent and never sneezed. Spalanzani was obliged, as has been said, to leave the place in order to escape a criminal charge of having fraudulently imposed an automaton upon human society. Coppola, too, had also disappeared.

When Nathanael awoke he felt as if he had been oppressed by a terrible nightmare; he opened his eyes and experienced an indescribable sensation of



mental comfort, whilst a soft and most beautiful sensation of warmth pervaded his body. He lay on his own bed in his own room at home; Clara was bending over him, and at a little distance stood his mother and Lothair. "At last, at last, O my darling Nathanael; now we have you again; now you are cured of your grievous illness, now you are mine again." And Clara's words came from the depths of her heart; and she clasped him in her arms. The bright scalding tears streamed from his eyes, he was so overcome with mingled feelings of sorrow and delight; and he gasped forth, "My Clara, my Clara!" Siegmund, who had staunchly stood by his friend in his hour of need, now came into the room. Nathanael gave him his hand—"My faithful brother, you have not deserted me." Every trace of insanity had left him, and in the tender hands of his mother and his beloved, and his friends, he quickly recovered his strength again. Good fortune had in the meantime visited the house; a niggardly old uncle, from whom they had never expected to get anything, had died, and left Nathanael's mother not only a considerable fortune, but also a small estate, pleasantly situated not far from the town. There they resolved to go and live, Nathanael and his mother, and Clara, to whom he was now to be married, and Lothair. Nathanael was become gentler and more childlike than he had ever been before, and now began really to understand Clara's supremely pure and noble character. None of them ever reminded him, even in the remotest degree, of the past. But when Siegmund took leave of him, he said, "By heaven, brother! I was in a bad way, but an angel came just at the right moment and led me back upon the path of light. Yes, it was Clara." Siegmund would not let him speak further, fearing lest the painful recollections of the past might arise too vividly and too intensely in his mind.

The time came for the four happy people to move to their little property. At noon they were going through the streets. After making several purchases they found that the lofty tower of the town house was throwing its giant shadows across the marketplace. "Come," said Clara, "let us go up to the top once more and have a look at the distant hills." No sooner said than done. Both of them, Nathanael and Clara, went up the tower; their mother, however, went on with the servant-girl to her new home, and Lothair, not feeling inclined to climb up all the many steps, waited below. There the two lovers stood arm-in-arm on the topmost gallery of the tower, and gazed out into the sweet-scented wooded landscape, beyond which the blue hills rose up like a giant's city.

"Oh! do look at that strange little grey bush, it looks as if it were actually walking towards us," said Clara. Mechanically he put his hand into his sidepocket; he found Coppola's perspective and looked for the bush; Clara stood in front of the glass. Then a convulsive thrill shot through his pulse and veins; pale as a corpse, he fixed his staring eyes upon her; but soon they began to roll, and a fiery current flashed and sparkled in them, and he yelled fearfully, like a hunted animal. Leaping up high in the air and laughing horribly at the same time, he began to shout, in a piercing voice, "Spin round, wooden doll! Spin round, wooden doll!" With the strength of a giant he laid hold upon Clara and tried to hurl her over, but in an agony of despair she clutched fast hold of the railing that went round the gallery. Lothair heard the madman raging and Clara's scream of terror: a fearful presentiment flashed across his mind. He ran up the steps; the door of the second flight was locked. Clara's scream for help rang out more loudly. Mad with rage and fear, he threw himself against the door, which at length gave way. Clara's cries were growing fainter and fainter,—"*Help! save me! save me!*" and her voice died away in the air. "*She is killed—murdered by that madman,*" shouted Lothair. The door to the gallery was also locked. Despair gave him the strength of a giant; he burst the door off its hinges. Good God! there was Clara in the grasp of the madman Nathanael, hanging over the gallery in the air; she only held to the iron bar with one hand. Quick as lightning, Lothair seized his sister and pulled her back, at the same time dealing the madman a blow in the face with his doubled fist, which sent him reeling backwards, forcing him to let go his victim.

Lothair ran down with his insensible sister in his arms. She was saved. But Nathanael ran round and round the gallery, leaping up in the air and shouting, "*Spin round, fire wheel! Spin round, fire wheel!*" The people heard the wild shouting, and a crowd began to gather. In the midst of them towered the advocate Coppelius, like a giant; he had only just arrived in the town, and had gone straight to the marketplace. Some were going up to overpower and take charge of the madman, but Coppelius laughed and said, "*Ha! ha! wait a bit; he'll come down of his own accord;*" and he stood gazing upwards along with the rest. All at once Nathanael stopped as if spellbound; he bent down over the railing, and perceived Coppelius. With a piercing scream, "*Ha! foine oyes! foine oyes!*" he leapt over.

When Nathanael lay on the stone pavement with a broken head, Coppelius had disappeared in the crush and confusion.

Several years afterwards it was reported that, outside the door of a pretty country house in a remote district, Clara had been seen sitting hand in hand with a pleasant gentleman, whilst two bright boys were playing at her feet. From this it may be concluded that she eventually found that quiet domestic happiness which her cheerful, blithesome character required, and which Nathanael, with his tempest-tossed soul, could never have been able to give her.

### **Footnotes for "The Sand-man":**

[1] "The Sand-man" forms the first of a series of tales called "The Night-pieces," and was published in 1817.

[2] See Schiller's *Räuber* Act V., Scene 1. Franz Moor, seeing that the failure of all his villainous schemes is inevitable, and that his own ruin is close upon him, is at length overwhelmed with the madness of despair, and unburdens the terrors of his conscience to the old servant Daniel, bidding him laugh him to scorn.

[3] Lazaro Spallanzani, a celebrated anatomist and naturalist (1729–1799), filled for several years the chair of Natural History at Pavia, and travelled extensively for scientific purposes in Italy, Turkey, Sicily, Switzerland, &c.

[4] Or Almanacs of the Muses, as they were also sometimes called, were periodical, mostly yearly publications, containing all kinds of literary effusions; mostly, however, lyrical. They originated in the eighteenth century. Schiller, A. W. and F. Schlegel, Tieck, and Chamisso, amongst others, conducted undertakings of this nature.

[5] Joseph Balsamo, a Sicilian by birth, calling himself Count Cagliostro, one of the greatest impostors of modern times, lived during the latter part of the eighteenth century. See Carlyle's "Miscellanies" for an account of his life and character.

[6] Daniel Nikolas Chodowiecki, painter and engraver, of Polish descent, was born at Dantzic in 1726. For some years he was so popular an artist that few books were published in Prussia without plates or vignettes by him. The catalogue of his works is said to include 3000 items.

[7] Pompeo Girolamo Batoni, an Italian painter of the eighteenth century, whose works were at one time greatly over-estimated.

[8] Jakob Ruysdael (c. 1625–1682), a painter of Haarlem, in Holland. His favourite subjects were remote farms, lonely stagnant water, deep-shaded woods with marshy paths, the sea coast—subjects of a dark melancholy kind. His sea pieces are greatly admired.

[9] Phlegon, the freedman of Hadrian, relates that a young maiden, Philemium, the daughter of Philostratus and Charitas, became deeply enamoured of a young man, named Machates, a guest in the house of her father. This did not meet with the approbation of her parents, and they turned Machates away. The young maiden took this so much to heart that she pined away and died. Some time afterwards Machates returned to his old lodgings, when he was visited at night by his beloved, who came from the grave to see

him again. The story may be read in Heywood's (Thos.) "Hierarchie of Blessed Angels," Book vii., p. 479 (London, 1637). Goethe has made this story the foundation of his beautiful poem *Die Braut von Korinth*, with which form of it Hoffmann was most likely familiar.

[[10](#)] This phrase (*Die Wahlverwandschaft* in German) has been made celebrated as the title of one of Goethe's works.

## "Automatons"

an excerpt from *The Serapion Brethren*

E. T. A. Hoffmann

translated by Alex. Ewing

(1814)

. . . "No, no," said Theodore, "the flood which has been rolling along in such stormy billows must be gently led away. I have a manuscript well adapted for that end, which some peculiar circumstances led to my writing at one time. Although it deals pretty largely with the mystical, and contains plenty of psychical marvels and strange hypotheses, it links itself on pretty closely to affairs of everyday life." He read:

""The Talking Turk" was attracting universal attention, and setting the town in commotion. The hall where this automaton was exhibited was thronged by a continual stream of visitors, of all sorts and conditions, from morning till night, all eager to listen to the oracular utterances which were whispered to them by the motionless lips of that wonderful quasi-human figure. The manner of the construction and arrangement of this automaton distinguished it in a marked degree from all puppets of the sort usually exhibited. It was, in fact, a very remarkable automaton. About the centre of a room of moderate size, containing only a few indispensable articles of furniture, at this figure, about the size of a human being, handsomely formed, dressed in a rich and tasteful Turkish costume, on a low seat shaped as a tripod, which the exhibitor would move if desired, to show that there was no means of communication between it and the ground. Its left hand was placed in an easy position on its knee, and its right rested on a small movable table. Its appearance, as has been said, was that of a well-proportioned, handsome man, but the most remarkable part of it was its head. A face expressing a genuine Oriental astuteness gave it an appearance of life rarely seen in wax figures, even when they represent the characteristic countenances of talented men. A light railing surrounded the figure, to prevent the spectators from crowding too closely about it; and only those who wished to inspect the construction of it (so far as the Exhibitor could allow this to be seen without

divulging his secret), and the person whose turn it was to put a question to it, were allowed to go inside this railing, and close up to it. The usual mode of procedure was to whisper the question you wished to ask into the Turk's right ear; on which he would turn, first his eyes, and then his whole head, towards you; and as you were sensible of a gentle stream of air, like breath coming from his lips, you could not but suppose that the low reply which was given to you did really proceed from the interior of the figure. From time to time, after a few answers had been given, the Exhibitor would apply a key to the Turk's left side, and wind up some clockwork with a good deal of noise. Here, also, he would, if desired, open a species of lid, so that you could see inside the figure a complicated piece of mechanism consisting of a number of wheels; and although you might not think it probable that this had anything to do with the speaking of the automaton, still it was evident that it occupied so much space that no human being could possibly be concealed inside, were he no bigger than Augustus's dwarf who was served up in a pasty. Besides the movement of the head, which always took place before an answer was given, the Turk would sometimes also raise his right hand, and either make a warning gesture with the finger, or, as it were, motion the question away with the whole hand. When this happened, nothing but repeated urging by the questioner could extract an answer, which was then generally ambiguous or angry. It might have been that the wheel work was connected with, or answerable for, those motions of the head and hands, although even in this the agency of a sentient being seemed essential. People wearied themselves with conjectures concerning the source and agent of this marvellous Intelligence. The walls, the adjoining room, the furniture, everything connected with the exhibition, were carefully examined and scrutinised, all completely in vain. The figure and its Exhibitor were watched and scanned most closely by the eyes of the most expert in mechanical science; but the more close and minute the scrutiny, the more easy and unconstrained were the actions and proceedings of both. The Exhibitor laughed and joked in the furthest corner of the room with the spectators, leaving the figure to make its gestures and give its replies as a wholly independent thing, having no need of any connection with him. Indeed he could not wholly restrain a slightly ironical smile when the table and the figure and tripod were being overhauled and peered at in every direction, taken as close to the light as possible, and inspected by powerful magnifying glasses. The upshot of it all was, that the mechanical geniuses said the devil himself could make neither head nor tail

of the confounded mechanism. And a hypothesis that the Exhibitor was a clever ventriloquist, and gave the answers himself (the breath being conveyed to the figure's mouth through hidden valves) fell to the ground, for the Exhibitor was to be heard talking loudly and distinctly to people among the audience at the very time when the Turk was making his replies.

"Notwithstanding the enigmatical, and apparently mysterious, character of this exhibition, perhaps the interest of the public might soon have grown fainter, had it not been kept alive by the nature of the answers which the Turk gave. These were sometimes cold and severe, while occasionally they were sparkling and jocular—even broadly so at times; at others they evinced strong sense and deep astuteness, and in some instances they were in a high degree painful and tragical. But they were always strikingly apposite to the character and affairs of the questioner, who would frequently be startled by a mystical reference to futurity in the answer given, only possible, as it would seem, in one cognizant of the hidden thoughts and feelings which dictated the question. And it happened not seldom that the Turk, questioned in German, would reply in some other language known to the questioner, in which case it would be found that the answer could not have been expressed with equal point, force, and conciseness in any other language than that selected. In short, no day passed without some fresh instance of a striking and ingenious answer of the wise Turk becoming the subject of general remark.

"It chanced, one evening, that Lewis and Ferdinand, two college friends, were in a company where the talking Turk was the subject of conversation. People were discussing whether the strangest feature of the matter was the mysterious and unexplained human influence which seemed to endow the figure with life, or the wonderful insight into the individuality of the questioner, or the remarkable talent of the answers. They were both rather ashamed to confess that they had not seen the Turk as yet, for it was *de rigueur* to see him, and every one had some tale to tell of a wonderful answer to some skilfully devised question.

"All figures of that description," said Lewis, "which can scarcely be said to counterfeit humanity so much as to travesty it—mere images of living death or inanimate life are in the highest degree hateful to me. When I was a little boy, I ran away crying from a waxwork exhibition I was taken to, and even to this day I never can enter a place of the sort without a horrible, eerie, shuddery feeling. When I see the staring, lifeless, glassy eyes of all the potentates, celebrated heroes, thieves, murderers, and so on, fixed upon me, I



feel disposed to cry with Macbeth

'Thou hast no speculation in those eyes  
Which thou dost glare with.'

""And I feel certain that most people experience the same feeling, though perhaps not to the same extent. For you may notice that scarcely any one talks, except in a whisper, in those waxwork places. You hardly ever hear a loud word. But it is not reverence for the Crowned Heads and other great people that produces this universal pianissimo; it is the oppressive sense of being in the presence of something unnatural and gruesome; and what I most of all detest is anything in the shape of imitation of the motions of Human Beings by machinery. I feel sure this wonderful, ingenious Turk will haunt me with his rolling eyes, his turning head, and his waving arm, like some necromantic goblin, when I lie awake of nights; so that the truth is I should very much prefer not going to see him. I should be quite satisfied with other people's accounts of his wit and wisdom."

""You know," said Ferdinand, "that I fully agree with you as to the disagreeable feeling produced by the sight of those imitations of Human Beings. But they are not all alike as regards that. Much depends on the workmanship of them, and on what they do. Now there was Ensler's rope dancer, one of the most perfect automatons I have ever seen. There was a vigour about his movements which was most effective, and when he suddenly sat down on his rope, and bowed in an affable manner, he was utterly delightful. I do not suppose any one ever experienced the gruesome feeling you speak of in looking at him. As for the Turk, I consider his case different altogether. The figure (which every one says is a handsome-looking one, with nothing ludicrous or repulsive about it) the figure really plays a very subordinate part in the business, and I think there can be little doubt that the turning of the head and eyes, and so forth, go on merely that our notice may be directed to them, for the very reason that it is elsewhere that the key to the mystery is to be found. That the breath comes out of the figure's mouth is very likely, perhaps certain; those who have been there say it does. It by no means follows that this breath is set in motion by the words which are spoken. There cannot be the smallest doubt that some human being is so placed as to be able, by means of acoustical and optical contrivances which we do not trace, to see and hear the persons who ask questions, and whisper

answers back to them; that not a soul, even amongst our most ingenious mechanics, has the slightest inkling, as yet, of the process by which this is done, shows that it is a remarkably ingenious one; and that, of course, is one thing which renders the exhibition very interesting. But much the most wonderful part of it, in my opinion, is the spiritual power of this unknown human being, who seems to read the very depths of the questioner's soul; the answers often display an acuteness and sagacity, and, at the same time, a species of dread half-light, half-darkness, which do really entitle them to be styled 'oracular' in the highest sense of the term. Several of my friends have told me instances of the sort which have fairly astounded me, and I can no longer refrain from putting the wonderful seer-gift of this unknown person to the test, so that I intend to go there tomorrow forenoon; and you must lay aside your repugnance to 'living puppets,' and come with me."

"Although Lewis did his best to get off, he was obliged to yield, on pain of being considered eccentric, so many were the entreaties to him not to spoil a pleasant party by his absence, for a party had been made up to go the next forenoon, and, so to speak, take the miraculous Turk by the very beard. They went accordingly, and although there was no denying that the Turk had an unmistakable air of Oriental *grandezza*, and that his head was handsome and effective, yet, as soon as Lewis entered the room, he was struck with a sense of the ludicrous about the whole affair, and when the Exhibitor put the key to the figure's side, and the wheels began their whirring, he made some rather silly joke to his friends about "the Turkish gentleman's having a roasting jack inside him." Every one laughed; and the Exhibitor—who did not seem to appreciate the joke very much—stopped winding up the machinery. Whether it was that the hilarious mood of the company displeased the wise Turk, or that he chanced not to be "in the vein" on that particular day, his replies—though some were to very witty and ingenious questions—seemed empty and poor; and Lewis, in particular, had the misfortune to find that he was scarcely ever properly understood by the oracle, so that he received for the most part crooked answers. The Exhibitor was clearly out of temper, and the audience were on the point of going away, ill-pleased and disappointed, when Ferdinand said—

""Gentlemen, we none of us seem to be much satisfied with the wise Turk, but perhaps we may be partly to blame ourselves, probably our questions may not have been altogether to his taste; the fact that he is turning his head round at this moment, and raising his arm" (the figure was really

doing so), "seems to indicate that I am not mistaken. A question has occurred to me to put to him; and if he gives one of his apposite answers to it, I think he will have quite redeemed his character."

"Ferdinand went up to the Turk, and whispered a word or two in his ear. The Turk raised his arm as unwilling to answer. Ferdinand persisted, and then the Turk turned his head towards him.

"Lewis saw that Ferdinand instantly turned pale; but after a few seconds he asked another question, to which he got an answer at once. It was with a most constrained smile that Ferdinand, turning to the audience, said—

"I can assure you, gentlemen, that as far as I am concerned at any rate, the Turk has redeemed his character. I must beg you to pardon me if I conceal the question and the answer from you; of course the secrets of the Oracle may not be divulged."

"Though Ferdinand strove hard to hide what he felt, it was but too evident from his efforts to be at ease that he was very deeply moved, and the cleverest answer could not have produced in the spectators the strange sensation, amounting to a species of awe, which his unmistakable emotion gave rise to in them. The fun and the jests were at an end; hardly another word was spoken, and the audience dispersed in uneasy silence.

"Dear Lewis," said Ferdinand, as soon as they were alone together, "I must tell you all about this. The Turk has broken my heart; for I believe I shall never get over the blow he has given me until I do really die of the fulfillment of his terrible prophecy."

"Lewis gazed at him in the profoundest amazement; and Ferdinand continued—

"I see, now, that the mysterious being who communicates with us by the medium of the Turk, has powers at his command which compel our most secret thoughts with magic might; it may be that this strange intelligence clearly and distinctly beholds that germ of the future which fructifies within us in mysterious connection with the outer world, and is thus cognizant of all that is to come upon us in distant days, like those persons who are endowed with that unhappy seer-gift which enables them to predict the hour of death."

"You must have put an extraordinary question," Lewis answered; "but I should think you are tacking on some unduly important meaning to the Oracle's ambiguous reply. Mere chance, I should imagine, has educed something which is, by accident, appropriate to your question; and you are attributing this to the mystic power of the person (most probably quite an

everyday sort of creature) who speaks to us through the Turk."

""What you say," answered Ferdinand, "is quite at variance with all the conclusions you and I have come to on the subject of what is ordinarily termed 'chance.' However, you cannot be expected to comprehend the precise condition in which I am, without my telling you all about an affair which happened to me some time ago, as to which I have never breathed a syllable to any one living till now. Several years ago I was on my way back to B—— from a place a long way off in East Prussia, belonging to my father. In K——, I met with some young Courland fellows who were going back to B—— too. We travelled together in three post carriages; and, as we had plenty of money, and were all about the time of life when people's spirits are pretty high, you may imagine the manner of our journey. We were continually playing the maddest pranks of every kind. I remember that we got to M—— about noon, and set to work to plunder the landlady's wardrobe. A crowd collected in front of the inn, and we marched up and down, dressed in some of her clothes, smoking, till the postilion's horn sounded, and off we set again. We reached D—— in the highest possible spirits, and were so delighted with the place and scenery, that we determined to stay there several days. We made a number of excursions in the neighbourhood, and so once, when we had been out all day at the Karlsberg, finding a grand bowl of punch waiting for us on our return, we dipped into it pretty freely. Although I had not taken more of it than was good for me, still, I had been in the grand sea breeze all day, and I felt all my pulses throbbing, and my blood seemed to rush through my veins in a stream of fire. When we went to our rooms at last, I threw myself down on my bed; but, tired as I was, my sleep was scarcely more than a kind of dreamy, half-conscious condition, in which I was cognizant of all that was going on about me. I fancied I could hear soft conversation in the next room, and at last I plainly made out a male voice saying—

""Well, good night, now; mind and be ready in good time.'

""A door opened and closed again, and then came a deep silence; but this was soon broken by one or two chords of a pianoforte.

""You know the magical effect of music sounding in that way in the stillness of night. I felt as though some beautiful spirit voice was speaking to me in these chords. I lay listening, expecting something in the shape of a fantasia—or some such piece of music—to follow; but fancy what it was when a most gloriously, exquisitely beautiful lady's voice sang, to a melody

that went to one's very heart, the words I am going to repeat to you—

*"Mio ben ricordati  
S' avvien ch' io mora  
Quanto quest' anima  
Fedel t' amo;  
Lo se pur amano  
Le fredde ceneri,  
Nel urna ancora  
T' adorero'."*[\[1\]](#)

""How can I ever hope to give you the faintest idea of the effect of those long-drawn swelling and dying notes upon me. I had never imagined anything approaching it. The melody was marvellous—quite unlike any other. It was, itself, the deep, tender sorrow of the most fervent love. As it rose in simple phrases, the clear upper notes like crystal bells, and sank till the rich low tunes died away like the sighs of a despairing plaint, a rapture which words cannot describe took possession of me—the pain of a boundless longing seized my heart like a spasm; I could scarcely breathe, my whole being was merged in an inexpressible, super-earthly delight. I did not dare to move; could only listen; soul and body were merged in ear. It was not until the tones had been for some time silent that tears, coming to my eyes, broke the spell, and restored me to myself. I suppose that sleep then came upon me, for when I was roused by the shrill notes of a posthorn, the bright morning sun was shining into my room, and I found that it had been only in my dreams that I had been enjoying a bliss more deep, a happiness more ineffable, than the world could otherwise have afforded me. For a beautiful lady came to me—it was the lady who had sung the song—and said to me, very fondly and tenderly—

""Then you *did* recognize me, my own dear Ferdinand! I knew that I had only to sing, and I should live again in you wholly, for every note was sleeping in your heart.'

""Then I recognized, with rapture unspeakable, that she was the beloved of my soul, whose image had been enshrined in my heart since childhood. Though an adverse fate had torn her from me for a time, I had found her again now; but my deep and fervent love for her melted into that wonderful melody of sorrow, and our words and our looks grew into

exquisite swelling tones of music, flowing together into a river of fire. Now, however, that I had awakened from this beautiful dream, I was obliged to confess to myself that I could trace no association of former days connected with it. I never had seen the beautiful lady before.

""I heard some one talking loudly and angrily in front of the house, and rising mechanically, I went to the window. An elderly gentleman, well dressed, was rating the postilion, who had damaged something about an elegant travelling carriage; at last this was put to rights, and the gentleman called upstairs to some one, 'We're all ready now; come along, it's time to be off.' I found that there had been a young lady looking out of the window next to mine; but as she drew quickly back, and had on a broad travelling hat, I did not see her face; when she went out, she turned round and looked up at me. Heavens! she was the singer! she was the lady of my dream! For a moment her beautiful eyes rested upon me, and the beam of a crystal tone seemed to pierce my heart like the point of a burning dagger, so that I felt an actual physical smart: all my members trembled, and I was transfixed with an indescribable bliss. She got quickly into the carriage, the postilion blew a cheerful tune as if in jubilant defiance, and in a moment they had disappeared round the corner of the street. I remained at the window like a man in a dream. My Courland friends came in to fetch me for an excursion which had been arranged: I never spoke; they thought I was ill. How could I have uttered a single word connected with what had occurred? I abstained from making any inquiries in the hotel about the occupants of the room next to mine; I felt that every word relating to her uttered by any lips but mine would be a desecration of my tender secret. I resolved to keep it always faithfully from thenceforth, to bear it about with me always, and to be forever true to her—my only love for evermore—although I might never see her again. You can quite understand my feelings. I know you will not blame me for having immediately given up everybody and everything but the most eager search for the very slightest trace of my unknown love. My jovial Courland friends were now perfectly unendurable to me; I slipped away from them quietly in the night, and was off as fast as I could travel to B——, to go on with my work there. You know I was always pretty good at drawing. Well, in B—— I took lessons in miniature painting from good masters, and got on so well that in a short time I was able to carry out the idea which had set me on this tack—to paint a portrait of her, as like as it could be made. I worked at it secretly, with locked doors. No human eye has ever seen it; for I had another picture

the exact size of it framed, and put her portrait into the frame instead of it, myself. Ever since, I have worn it next my heart.

""I have never mentioned this affair—much the most important event in my life—until today; and you are the only creature in the world, Lewis, to whom I have breathed a word of my secret. Yet this very day a hostile influence—I know not whence or what—comes piercing into my heart and life! When I went up to the Turk, I asked—thinking of my beloved—

""""Will there ever be a time again for me like that which was the happiest in my life?"

""""The Turk was most unwilling to answer me, as I daresay you observed; but at last, as I persisted, he said—

""""I am looking into your breast; but the glitter of the gold, which is towards me, distracts me. Turn the picture round.'

""""Have I words for the feeling which went shuddering through me? I am sure you must have seen how I was startled. The picture was really placed on my breast in the way the Turk had said; I turned it round, unobserved, and repeated my question. Then the figure said, in a sorrowful tone—

""""Unhappy man! At the very moment when next you see her, she will be lost to you forever!""

""Lewis was about to try to cheer his friend, who had fallen into a deep reverie, but some mutual acquaintances came in, and they were interrupted.

""The story of this fresh instance of a mysterious answer by the Turk spread in the town, and people busied themselves in conjectures as to the unfavourable prophecy which had so upset the unprejudiced Ferdinand. His friends were besieged with questions, and Lewis had to invent a marvellous tale, which had all the more universal a success that it was remote from the truth. The coterie of people with whom Ferdinand had been induced to go and see the Turk was in the habit of meeting once a week, and at their next meeting the Turk was necessarily the topic of conversation, as efforts were continually being made to obtain, from Ferdinand himself, full particulars of an adventure which had thrown him into such an evident despondency. Lewis felt most deeply how bitter a blow it was to Ferdinand to find the secret of his romantic love, preserved so long and faithfully, penetrated by a fearful, unknown power; and he, like Ferdinand, was almost convinced that the mysterious link which attaches the present to the future must be clear to the vision of that power to which the most hidden secrets were thus manifest. Lewis could not help believing the Oracle; but the malevolence, the

relentlessness with which the misfortune impending over his friend had been announced, made him indignant with the undiscovered Being which spoke by the mouth of the Turk, so that he placed himself in persistent opposition to the Automaton's many admirers; and whilst they considered that there was much impressiveness about its most natural movements, enhancing the effect of its oracular sayings, he maintained that it was those very turnings of the head and rollings of the eyes which he considered so absurd, and that this was the reason why he could not help making a joke on the subject; a joke which had put the Exhibitor out of temper, and probably the invisible agent as well. Indeed the latter had shown that this was so by giving a number of stupid and unmeaning answers.

""I must tell you," said Lewis, "that the moment I went into the room the figure reminded me of a most delightful Nutcracker which a cousin of mine once gave me at Christmas time when I was a little boy. The little fellow had the gravest and most comical face ever seen, and when he had a hard nut to crack there was some arrangement inside him which made him roll his great eyes, which projected far out of his head, and this gave him such an absurdly life-like effect that I could play with him for hours; in fact, in my secret soul, I almost thought he was real. All the marionettes I have seen since then, however perfect, I have thought stiff and lifeless compared to my glorious Nutcracker. I had heard much of some wonderful automaton in the Arsenal at Dantzic, and I took care to go and see them when I was there some years ago. Soon after I got into the place where they were, an old-fashioned German soldier came marching up to me, and fired off his musket with such a bang that the great vaulted hall rang again. There were other similar tricks which I forget about now; but at length I was taken into a room where I found the God of War—the terrible Mars himself—with all his suite. He was seated, in a rather grotesque dress, on a throne ornamented with arms of all sorts; heralds and warriors were standing round him. As soon as we came before the throne, a set of drummers began to roll their drums, and fifers blew on their fifes in the most horrible way—all out of tune—so that one had to put one's fingers in one's ears. My remark was that the God of War was very badly off for a band, and every one agreed with me. The drums and fifes stopped; the heralds began to turn their heads about, and stamp with their halberds, and finally the God of War, after rolling his eyes for a time, started up from his seat, and seemed to be coming straight at us. However, he soon sank back on his throne again, and after a little more drumming and fifing,



everything reverted to its state of wooden repose. As I came away from seeing these automatons, I said to myself, 'Nothing like my Nutcracker!' And now that I have seen the sage Turk, I say again, 'Give me my Nutcracker.'"

"People laughed at this, of course; though it was believed to be 'more jest than earnest,' for, to say nothing of the remarkable cleverness of many of the Turk's answers, the undiscoverable connection between him and the hidden Being who, besides speaking through him, must produce the movements which accompanied his answers, was unquestionably very wonderful, at all events a masterpiece of mechanical and acoustical skill.

"Lewis was himself obliged to admit this; and every one was extolling the inventor of the automaton, when an elderly gentleman who, as a general rule, spoke very little, and had been taking no part in the conversation on the present occasion, rose from his chair (as he was in the habit of doing when he did finally say a few words, always greatly to the point) and began, in his usual polite manner, as follows—

""Will you be good enough to allow me, gentlemen—I beg you to pardon me. You have reason to admire the curious work of art which has been interesting us all for so long; but you are wrong in supposing the commonplace person who exhibits it to be the inventor of it. The truth is that he really has no hand at all in what are the truly remarkable features of it. The originator of them is a gentleman highly skilled in matters of the kind—one who lives amongst us, and has done so for many years—whom we all know very well, and greatly respect and esteem."

"Universal surprise was created by this, and the elderly gentleman was besieged with questions, on which he continued;

""The gentleman to whom I allude is none other than Professor X——. The Turk had been here a couple of days, and nobody had taken any particular notice of him, though Professor X—— took care to go and see him at once, because everything in the shape of an Automaton interests him in the highest degree. When he had heard one or two of the Turk's answers, he took the Exhibitor apart and whispered a word or two in his ear. The man turned pale, and shut up his exhibition as soon as the two or three people who were then in the room had gone away. The bills disappeared from the walls, and nothing more was heard of the Talking Turk for a fortnight. Then new bills came out, and the Turk was found with the fine new head, and all the other arrangements as they are at present—an unsolvable riddle. It is since that time that his answers have been so clever and so interesting. But that all this

is the work of Professor X—— admits of no question. The Exhibitor, in the interval, when the figure was not being exhibited, spent all his time with him. Also it is well known that the Professor passed several days in succession in the room where the figure is. Besides, gentlemen, you are no doubt aware that the Professor himself possesses a number of most extraordinary automaton, chiefly musical, which he has long vied with Hofrath B—— in producing, keeping up with him a correspondence concerning all sorts of mechanical, and, people say, even magical arts and pursuits, and that, did he but choose, he could astonish the world with them. But he works in complete privacy, although he is always ready to show his extraordinary inventions to all who take a real interest in such matters."

"It was, in fact, matter of notoriety that this Professor X——, whose principal pursuits were natural philosophy and chemistry, delighted, next to them, in occupying himself with mechanical research; but no one in the assemblage had had the slightest idea that he had had any connection with the "Talking Turk," and it was from the merest hearsay that people knew anything concerning the curiosities which the old gentleman had referred to. Ferdinand and Lewis felt strangely and vividly impressed by the old gentleman's account of Professor X——, and the influence which he had brought to bear on that strange automaton.

"I cannot hide from you," said Ferdinand, "that a hope is dawning upon me that, if I get nearer to this Professor X——, I may, perhaps, come upon a clue to the mystery which is weighing so terribly upon me at present. And it is possible that the true significance and import of the relations which exist between the Turk (or rather the hidden entity which employs him as the organ of its oracular utterances) and myself might, could I get to comprehend it, perhaps comfort me, and weaken the impression of those words, for me so terrible. I have made up my mind to make the acquaintance of this mysterious man, on the pretext of seeing his automaton; and as they are musical ones, it will not be devoid of interest for you to come with me."

"As if it were not sufficient for me," said Lewis, "to be able to aid you, in your necessity, with counsel and help! But I cannot deny that even today, when the old gentleman was mentioning Professor X——'s connection with the Turk, strange ideas came into my mind; although perhaps I am going a long way about in search of what lies close at hand, could one but see it. For instance, to look as close at hand as possible for the solution of the mystery, may it not be the case that the invisible being knew that you wore

the picture next your heart, so that a mere lucky guess might account for the rest? Perhaps it was taking its revenge upon you for the rather uncourteous style in which we were joking about the Turk's wisdom."

""Not one human soul," Ferdinand answered, "has ever set eyes on the picture; this I told you before. And I have never told any creature but yourself of the adventure which has had such an immensely important influence on my whole life. It is an utter impossibility that the Turk can have got to know of this in any ordinary manner. Much more probably, what you say you are 'going a long roundabout way' in search of may be much nearer the truth."

""Well then," said Lewis, "what I mean is this; that this automaton, strongly as I appeared today to assert the contrary, is really one of the most extraordinary phenomena ever beheld, and that everything goes to prove that whoever controls and directs it has at his command higher powers than is supposed by those who go there simply to gape at things, and do no more than wonder at what is wonderful. The figure is nothing more than the outward form of the communication; but that form has been cleverly selected, as such, since the shape, appearance, and movements of it are well adapted to occupy the attention in a manner favourable for the preservation of the secret, and, particularly, to work upon the questioners favourably as regards the intelligence, whatsoever it is, which gives the answers. There cannot be any human being concealed inside the figure; that is as good as proved, so that it is clearly the result of some acoustic deception that we think the answers come from the Turk's mouth. But how this is accomplished—how the Being who gives the answers is placed in a position to hear the questions and see the questioners, and at the same time to be audible by them—certainly remains a complete mystery to me. Of course all this merely implies great acoustic and mechanical skill on the part of the inventor, and remarkable acuteness, or, I might say, systematic craftiness, in leaving no stone unturned in the process of deceiving us. And I admit that this part of the riddle interests me the less, inasmuch as it falls completely into the shade in comparison with the circumstance (which, is the only part of the affair which is so extraordinarily remarkable) that the Turk often reads the very soul of the questioner. How, if it were possible to this Being which gives the answers, to acquire by some process unknown to us, a psychic influence over us, and to place itself in a spiritual *rapproch* with us, so that it can comprehend and read our minds and thoughts, and more than that, have cognizance of our whole inner being; so that, if it does not clearly speak out the secrets which are lying dormant

within us, it does yet evoke and call forth, in a species of *extasis* induced by its *rapport* with the exterior spiritual principle, the suggestions, the outlines, the shadowings of all which is reposing within our breasts, clearly seen by the eye of the spirit, in brightest illumination! On this assumption the psychical power would strike the strings within us, so as to make them give forth a clear and vibrating chord, audible to us, and intelligible by us, instead of merely murmuring, as they do at other times; so that it is we who answer our own selves; the voice which we hear is produced from within ourselves by the operation of this unknown spiritual power, and vague presentiments and anticipations of the future brighten into spoken prognostications—just as, in dreams, we often find that a voice, unfamiliar to us, tells us of things which we do not know, or as to which we are in doubt, being, in reality, a voice proceeding from ourselves, although it seems to convey to us knowledge which previously we did not possess. No doubt the Turk (that is to say, the hidden power which is connected with him) seldom finds it necessary to place himself *en rapport* with people in this way. Hundreds of them can be dealt with in the cursory, superficial manner adapted to their queries and characters, and it is seldom that a question is put which calls for the exercise of anything besides ready wit. But by any strained or exalted condition of the questioner the Turk would be affected in quite a different way, and he would then employ those means which render possible the production of a psychic *rapport*, giving him the power to answer from out of the inner depths of the questioner. His hesitation in replying to deep questions of this kind may be due to the delay which he grants himself to gain a few moments for the bringing into play of the power in question. This is my true and genuine opinion; and you see that I have not that contemptuous notion of this work of art (or whatever may be the proper term to apply to it) that I would have had you believe I had. But I do not wish to conceal anything from you; though I see that if you adopt my idea, I shall not have given you any real comfort at all."

""You are wrong there, dear friend," said Ferdinand. "The very fact that your opinion does chime in with a vague notion which I felt, dimly, in my own mind, comforts me very much. It is only myself that I have to take into account; my precious secret is not discovered, for I know that you will guard it as a sacred treasure. And, by-the-bye, I must tell you of a most extraordinary feature of the matter, which I had forgotten till now. Just as the Turk was speaking his latter words, I fancied that I heard one or two broken

phrases of the sorrowful melody, '*mio ben ricordati*,' and then it seemed to me that one single, long-drawn note of the glorious voice which I heard on that eventful night went floating by."

""Well," said Lewis, "and I remember, too, that, just as your answer was being given to you, I happened to place my hand on the railing which surrounds the figure. I felt it thrill and vibrate in my hand, and I fancied also that I could hear a kind of musical sound, for I cannot say it was a vocal note, passing across the room. I paid no attention to it, because, as you know, my head is always full of music, and I have several times been wonderfully deceived in a similar way; but I was very much astonished, in my own mind, when I traced the mysterious connection between that sound and your adventure in D——."

""The fact that Lewis had heard the sound as well as himself, was to Ferdinand a proof of the psychic *rapport* which existed between them; and as they further diseased the marvels of the affair, he began to feel the heavy burden which had weighed upon him since he heard the fatal answer lifted away, and was ready to go forward bravely to meet whatsoever the future might have in store.

""It is impossible that I can lose her," he said. "She is my heart's queen, and will always be there, as long as my own life endures."

""They went and called on Professor X——, in high hope that he would be able to throw light on many questions relating to occult sympathies and the like, in which they were deeply interested. They found him to be an old man, dressed in old-fashioned French style, exceedingly keen and lively, with small grey eyes which had an unpleasant way of fixing themselves on one, and a sarcastic smile, not very attractive, playing about his mouth.

""When they had expressed their wish to see some of his automats, he said, "Ah! and you really take an interest in mechanical matters, do you? Perhaps you have done something in that direction yourselves? Well, I can show you, in this house here, what you will look for in vain in the rest of Europe: I may say, in the known world."

""There was something most unpleasant about the Professor's voice; it was a high-pitched, screaming sort of discordant tenor, exactly suited to the mountebank tone in which he proclaimed his treasures. He fetched his keys with a great clatter, and opened the door of a tastefully and elegantly furnished hall, where the automats were. There was a piano in the middle of the room, on a raised platform; beside it, on the right, a life-sized figure of

a man, with a flute in his hand; on the left, a female figure, seated at an instrument somewhat resembling a piano; behind her were two boys, with a drum and a triangle. In the background our two friends noticed an orchestrion (which was an instrument already known to them), and all round the walls were a number of musical clocks. The Professor passed, in a cursory manner, close by the orchestrion and the clocks, and just touched the automatons, almost imperceptibly; then he sat down at the piano, and began to play, *pianissimo*, an *andante* in the style of a march. He played it once through by himself; and as he commenced it for the second time the flute player put his instrument to his lips, and took up the melody; then one of the boys drummed softly on his drum in the most accurate time, and the other just touched his triangle, so that you could hear it and no more. Presently the lady came in with full chords, of a sound something like those of a harmonica, which she produced by pressing down the keys of her instrument; and now the whole room kept growing more and more alive; the musical clocks came in one by one, with the utmost rhythmical precision; the boy drummed louder; the triangle rang through the room, and lastly the orchestrion set to work, and drummed and trumpeted *fortissimo*, so that the whole place shook again; and this went on till the Professor wound up the whole business with one final chord, all the machines finishing also, with the utmost precision. Our friends bestowed the applause which the Professor's complacent smile (with its undercurrent of sarcasm) seemed to demand of them. He went up to the figures to set about exhibiting some further similar musical feats; but Lewis and Ferdinand, as if by a preconcerted arrangement, declared that they had pressing business which prevented their making a longer stay, and took their leave of the inventor and his machines.

""Most interesting and ingenious, wasn't it?" said Ferdinand; but Lewis's anger, long restrained, broke out.

""Oh! confusion on that wretched Professor!" he cried. "What a terrible, terrible disappointment! Where are all the revelations we expected? What became of the learned, instructive discourse which we thought he would deliver to us, as to disciples at Sais?"

""At the same time," said Ferdinand, "we have seen some very ingenious mechanical inventions, curious and interesting from a musical point of view. Clearly, the flute player is the same as Vaucanson's well-known machine; and a similar mechanism applied to the fingers of the female figure is, I suppose, what enables her to bring out those really beautiful tones

from her instrument. The way in which all the machines work together is really astonishing."

""It is exactly that which drives me so wild," said Lewis. "All that machine-music (in which I include the Professor's own playing) makes every bone in my body ache. I am sure I do not know when I shall get over it! The fact of any human being's doing anything in association with those lifeless figures which counterfeit the appearance and movements of humanity has always, to me, something fearful, unnatural, I may say terrible, about it. I suppose it would be possible, by means of certain mechanical arrangements inside them, to construct automatons which should dance, and then to set them to dance with human beings, and twist and turn about in all sorts of figures; so that we should have a living man putting his arms about a lifeless partner of wood, and whirling round and round with her, or rather it. Could you look at such a sight, for an instant, without horror? At all events, all machine-music is to me a thing altogether monstrous and abominable; and a good stocking-loom is, in my opinion, worth all the most perfect and ingenious musical clocks in the universe put together. For is it the breath, merely, of the performer on a wind instrument, or the skillful, supple fingers of the performer on a stringed instrument, which evoke those tones which lay upon us a spell of such power, and awaken that inexpressible feeling, akin to nothing else on earth, the sense of a distant spirit world, and of our own higher life therein? Is it not, rather, the mind, the soul, the heart, which merely employ those bodily organs to give forth into our external life that which is felt in our inner depths? so that it can be communicated to others, and awaken kindred chords in them, opening, in harmonious echoes, that marvellous kingdom from whence those tones come darting, like beams of light? To set to work to make music by means of valves, springs, levers, cylinders, or whatever other apparatus you choose to employ, is a senseless attempt to make the means to an end accomplish what can result only when those means are animated and, in their minutest movements, controlled by the mind, the soul, and the heart. The gravest reproach you can make to a musician is that he plays without expression; because, by so doing, he is marring the whole essence of the matter. Yet the coldest and most unfeeling executant will always be far in advance of the most perfect of machines. For it is impossible that no impulse whatever, from the inner man shall ever, even for a moment, animate his rendering; whereas, in the case of a machine, no such impulse can ever do so. The attempts of mechanics to imitate, with

more or less approximation to accuracy, the human organs in the production of musical sounds, or to substitute mechanical appliances for those organs, I consider tantamount to a declaration of war against the spiritual element in music; but the greater the forces they array against it, the more victorious it is. For this very reason, the more perfect that this sort of machinery is, the more I disapprove of it; and I infinitely prefer the commonest barrel organ, in which the mechanism attempts nothing but to be mechanical, to Vaucauson's flute player, or the harmonica girl.

""I entirely agree with you," said Ferdinand, "and indeed you have merely put into words what I have always thought; and I was much struck with it today at the Professor's. Although I do not so wholly live and move and have my being in music as you do, and consequently am not so sensitively alive to imperfections in it, I, too, have always felt a repugnance to the stiffness and lifelessness of machine-music; and, I can remember, when I was a child at home, how I detested a large, ordinary musical clock, which played its little tune every hour. It is a pity that those skillful mechanics do not try to apply their knowledge to the improvement of musical instruments, rather than to puerilities of this sort."

""Exactly," said Lewis. "Now, in the case of instruments of the keyboard class a great deal might be done. There is a wide field open in that direction to clever mechanical people, much as has been accomplished already; particularly in instruments of the pianoforte genus. But it would be the task of a really advanced system of the 'mechanics of music' to closely observe, minutely study, and carefully discover that class of sounds which belong, most purely and strictly, to Nature herself, to obtain a knowledge of the tones which dwell in substances of every description, and then to take this mysterious music and enclose it in some description of instrument, where it should be subject to man's will, and give itself forth at his touch. All the attempts to bring music out of metal or glass cylinders, glass threads, slips of glass, or pieces of marble; or to cause strings to vibrate or sound, in ways unlike the ordinary ways, seem to me to be interesting in the highest degree: and what stands in the way of our real progress in the discovery of the marvellous acoustical secrets which lie hidden all around us in nature is, that every imperfect attempt at an experiment is at once held up to laudation as being a new and utterly perfect invention, either for vanity's sake, or for money's. This is why so many new instruments have started into existence—most of them with grand or ridiculous names—and have disappeared and



been forgotten just as quickly."

""Your 'higher mechanics of music' seems to be a most interesting subject," said Ferdinand, "although, for my part, I do not as yet quite perceive the object at which it aims."

""The object at which it aims," said Lewis, "is the discovery of the most absolutely perfect kind of musical sound; and according to my theory, musical sound would be the nearer to perfection the more closely it approximated to such of the mysterious tones of nature as are not wholly dissociated from this earth."

""I presume," said Ferdinand, "that it is because I have not penetrated so deeply into this subject as you have, but you must allow me to say that I do not quite understand you."

""Then," said Lewis, "let me give you some sort of an idea how it is that all this question exhibits itself to my mind."

""In the primeval condition of the human race, while (to make use of almost the very words of a talented writer—Schubert—in his 'Glimpses at the Night Side of Natural Science') mankind as yet was dwelling in its pristine holy harmony with nature, richly endowed with a heavenly instinct of prophecy and poetry; while, as yet, Mother Nature continued to nourish from the fount of her own life, the wondrous being to whom she had given birth, she encompassed him with a holy music, like the afflatus of a continual inspiration; and wondrous tones spake of the mysteries of her unceasing activity. There has come down to us an echo from the mysterious depths of those primeval days—that beautiful notion of the music of the spheres, which, when as a boy, I first read of it in 'The Dream of Scipio,' filled me with the deepest and most devout reverence. I often used to listen, on quiet moonlight nights, to hear if those wondrous tones would come to me, borne on the wings of the whispering airs. However, as I said to you already, those nature-tones have not yet all departed from this world, for we have an instance of their survival, and occurrence in that 'Music of the Air' or 'Voice of the Demon,' mentioned by a writer on Ceylon—a sound which so powerfully affects the human system, that even the least impressionable persons, when they hear those tones of nature imitating, in such a terrible manner, the expression of human sorrow and suffering, are struck with painful compassion and profound terror! Indeed, I once met with an instance of a phenomenon of a similar kind myself, at a place in East Prussia. I had been living there for some time; it was about the end of autumn, when, on

quiet nights, with a moderate breeze blowing, I used distinctly to hear tones, sometimes resembling the deep, stopped, pedal pipe of an organ, and sometimes like the vibrations from a deep, soft-toned bell. I often distinguished, quite clearly, the low F, and the fifth above it (the C), and not seldom the minor third above, E flat, was perceptible as well; and then this tremendous chord of the seventh, so woeful and so solemn, produced on one the effect of the most intense sorrow, and even of terror!

""There is, about the imperceptible commencement, the swelling and the gradual dying of those nature-tones a something which has a most powerful and indescribable effect upon us; and any instrument which should be capable of producing this would, no doubt, affect us in a similar way. So that I think the harmonica comes the nearest, as regards its tone, to that perfection, which is to be measured by its influence on our minds. And it is fortunate that this instrument (which chances to be the very one which imitates those nature-tones with such exactitude) happens to be just the very one which is incapable of lending itself to frivolity or ostentation, but exhibits its characteristic qualities in the purest of simplicity. The recently invented 'harmonichord' will doubtless accomplish much in this direction. This instrument, as you no doubt know, sets strings a-vibrating and a-toning (not bells, as in the harmonica) by means of mechanism, which is set in motion by the pressing down of keys, and the rotation of a cylinder. The performer has, under his control, the commencement, the swelling out, and the diminishing, of the tones much more than is the case with the harmonica, though as yet the harmonichord has not the tone of the harmonica, which sounds as if it came straight from another world."

""I have heard that instrument," said Ferdinand, "and certainly the tone of it went to the very depths of my being, although I thought the performer was doing it scant justice. As regards the rest, I think I quite understand you, although I do not, as yet, quite see into the closeness of the connection between those 'nature-tones' and music."

"Lewis answered—"Can the music which dwells within us be any other than that which lies buried in nature as a profound mystery, comprehensible only by the inner, higher sense, uttered by instruments, as the organs of it, merely in obedience to a mighty spell, of which we are the masters? But, in the purely psychical action and operation of the spirit—that is to say, in dreams—this spell is broken; and then, in the tones of familiar instruments, we are enabled to recognise those nature-tones as wondrously engendered in

the air, they come floating down to us, and swell and die away."

""I think of the Æolian harp," said Ferdinand. "What is your opinion about that ingenious invention?"

""Every attempt," said Lewis, "to tempt Nature to give forth her tones is glorious, and highly worthy of attention. Only, it seems to me that, as yet, we have only offered her trifling toys, which she has often shattered to pieces in her indignation. Much grander idea than all those playthings (like Æolian harps) was the 'storm harp' which I have read of. It was made of thick chords of wire, which were stretched out at considerable distances apart, in the open country, and gave forth great, powerful chords when the wind smote upon them.

""Altogether, there is still a wide field open to thoughtful inventors in this direction, and I quite believe that the impulse recently given to natural science in general will be perceptible in this branch of it, and bring into practical existence much which is, as yet, nothing but speculation."

"Just at this moment there came suddenly floating through the air an extraordinary sound, which, as it swelled and became more distinguishable, seemed to resemble the tone of a harmonica. Lewis and Ferdinand stood rooted to the spot in amazement, not unmingled with awe; the tones took the form of a profoundly sorrowful melody sung by a female voice. Ferdinand grasped Lewis by the hand, whilst the latter whisperingly repeated the words,

""*Mio ben, ricordati, s' avvien ch' io mora.*"

"At the time when this occurred they were outside of the town, and before the entrance to a garden which was surrounded by lofty trees and tall hedges. There was a pretty little girl—whom they had not observed before—sitting playing in the grass near them, and she sprang up crying, "Oh, how beautifully my sister is singing again! I must take her some flowers, for she always sings sweeter and longer when she sees a beautiful carnation." And with that she gathered a bunch of flowers, and went skipping into the garden with it, leaving the gate ajar, so that our friends could see through it. What was their astonishment to see Professor X—— standing in the middle of the garden, beneath a lofty ash tree! Instead of the repellant grin of irony with which he had received them at his house, his face wore an expression of deep melancholy earnestness, and his gaze was fixed upon the heavens, as if he were contemplating that world beyond the skies, whereof those marvellous tones, floating in the air like the breath of a zephyr, were telling. He walked up and down the central alley, with slow and measured steps; and, as he

passed along, everything around him seemed to waken into life and movement. In every direction crystal tones came scintillating out of the dark bushes and trees, and, streaming through the air like flame, united in a wondrous concert, penetrating the inmost heart, and waking in the soul the most rapturous emotions of a higher world. Twilight was falling fast; the Professor disappeared among the hedges, and the tones died away in *pianissimo*. At length our friends went back to the town in profound silence; but, as Lewis was about to quit Ferdinand, the latter clasped him firmly, saying—

""Be true to me! Do not abandon me! I feel, too clearly, some hostile foreign influence at work upon my whole existence, smiting upon all its hidden strings, and making them resound at its pleasure. I am helpless to resist it, though it should drive me to my destruction! Can that diabolical, sneering irony, with which the Professor received us at his house, have been anything other than the expression of this hostile principle? Was it with any other intention than that of getting his hands washed of me forever, that he fobbed us off with those automatons of his?"

""You are very probably right," said Lewis; "for I have a strong suspicion myself that, in some manner which is as yet an utter riddle to me, the Professor does exercise some sort of power or influence over your fate, or, I should rather say, over that mysterious psychical relationship, or affinity, which exists between you and this lady. It may be that, being mixed up in some way with this affinity, in his character of an element hostile to it, he strengthens it by the very fact that he opposes it: and it may also be that that which renders you so extremely unacceptable to him is the circumstance that your presence awakens, and sets into lively movement all the strings and chords of this mutually sympathetic condition, and this contrary to his desire, and, very probably, in opposition to some conventional family arrangement."

""Our friends determined to leave no stone unturned in their efforts to make a closer approach to the Professor, with the hope that they might succeed, sooner or later, in clearing up this mystery which so affected Ferdinand's destiny and fate, and they were to have paid him a visit on the following morning as a preliminary step. However, a letter, which Ferdinand unexpectedly received from his father, summoned him to B——; it was impossible for him to permit himself the smallest delay, and in a few hours he was off, as fast as post horses could convey him, assuring Lewis, as he started, that nothing should prevent his return in a fortnight, at the very

furthest.

"It struck Lewis as a singular circumstance that, soon after Ferdinand's departure, the same old gentleman who had at first spoken of the Professor's connection with "the Talking Turk," took an opportunity of enlarging to him on the fact that X——'s mechanical inventions were simply the result of an extreme enthusiasm for mechanical pursuits, and of deep and searching investigations in natural science; he also more particularly lauded the Professor's wonderful discoveries in music, which, he said, he had not as yet communicated to any one, adding that his mysterious laboratory was a pretty garden outside the town, and that passers by had often heard wondrous tones and melodies there, just as if the whole place were peopled by fays and spirits.

"The fortnight elapsed, but Ferdinand did not come back. At length, when two months had gone by, a letter came from him to the following effect —

""Read and marvel; though you will learn only that which, perhaps, you strongly suspected would be the case, when you got to know more of the Professor—as I hope you did. As the horses were being changed in the village of P——, I was standing, gazing into the distance, not thinking specially of anything in particular. A carriage drove by, and stopped at the church, which was open. A young lady, simply dressed, stepped out of the carriage, followed by a young gentleman in a Russian Jaeger uniform, wearing several decorations; two gentlemen got down from a second carriage. The innkeeper said, 'Oh, this is the stranger couple our clergyman is marrying today.' Mechanically I went into the church, just as the clergyman was concluding the service with the blessing. I looked at the couple—the bride was my sweet singer. She looked at me, turned pale, and fainted. The gentleman who was behind her caught her in his arms. It was Professor X——. What happened further I do not know, nor have I any recollection as to how I got here; probably Professor X—— can tell you all about it. But a peace and a happiness, such as I have never known before, have now taken possession of my soul. The mysterious prophecy of the Turk was a cursed falsehood, a mere result of blind groping with unskillful antennæ. Have I lost her? Is she not mine forever in the glowing inner life?

""It will be long ere you hear of me, for I am going on to K——, and perhaps to the extreme north, as far as P——."

"Lewis gathered the distracted condition of his friend's mind, only too

plainly, from his language, and the whole affair became the greater a riddle to him when he ascertained that it was matter of certainty that Professor X—— had not quitted the town.

""How," thought he, "if all this be but a result of the conflict of mysterious psychical relations (existing, perhaps, between several people) making their way out into everyday life, and involving in their circle even outward events, independent of them, so that the deluded inner sense looks upon them as phenomena proceeding unconditionally from itself, and believes in them accordingly? It may be that the hopeful anticipation which I feel within me will be realised—for my friend's consolation. For the Turk's mysterious prophecy is fulfilled, and perhaps, through that very fulfillment, the mortal blow which menaced my friend is averted.""

"Well," said Ottmar, as Theodore came to a sudden stop, "is that all? Where is the explanation? What became of Ferdinand, the beautiful singer, Professor X——, and the Russian officer?"

"You know," said Theodore, "that I told you at the beginning that I was only going to read you a fragment, and I consider that the story of the Talking Turk is only of a fragmentary character, essentially. I mean, that the imagination of the reader, or listener, should merely receive one or two more or less powerful impulses, and then go on swinging, pendulum-like, of its own accord, as it chooses. But if you, Ottmar, are really anxious to have your mind set at rest over Ferdinand's future condition, remember the dialogue on opera which I read to you some time since. This is the same Ferdinand who appears therein, sound of mind and body; in the 'Talking Turk' he is at an earlier stage of his career. So that probably his somnambulistic love affair ended satisfactorily enough."

"To which," said Ottmar, "has to be added that our Theodore used, at one time, to take a wonderful delight in exciting people's imaginations by means of the most extraordinary—nay, wild and insane—stories, and then suddenly break them off. Not only this, but everything he did, at that time, assumed a fragmentary form. He read second volumes only, not troubling himself about the firsts or thirds; saw only the second and third acts of plays; and so on."

"And," said Theodore, "that inclination I still have; to this hour nothing is so distasteful to me as when, in a story or a novel, the stage on which the imaginary world has been in action comes to be swept so clean by the historic besom that there is not the smallest grain or particle of dust left on it; when

one goes home so completely sated and satisfied that one has not the faintest desire left to have another peep behind the curtain. On the other hand, many a fragment of a clever story sinks deep into my soul, and the continuance of the play of my imagination, as it goes along on its own swing, gives me an enduring pleasure. Who has not felt this over Goethe's 'Nut-brown Maid'! And, above all, his fragment of that most delightful tale of the little lady whom the traveller always carried about with him in a little box always exercises an indescribable charm upon me."

"Enough," interrupted Lothair. "We are not to hear any more about the Talking Turk, and the story was really all told, after all. So let Ottmar begin without more ado." . . .

**Footnotes for "Automatons":**

[\[1\]](#)

"Darling! remember well,  
When I have passed away,  
How this unchanging soul  
Loves Thee for aye!  
Though my poor ashes rest  
Deep in the silent grave,  
Ev'n in the urn of Death  
Thee I adore!"



# The Turk and Edgar Allan Poe

"Maelzel's Chess-Player"

"The Man That Was Used Up"

While E. T. A. Hoffmann's creations generally overshadow the name of the author behind them, Edgar Allan Poe (1809–1849) needs very little introduction. In his short career as a writer and a critic, Poe was the cornerstone of the Romantic movement in the United States. He is the most famous author in this collection and the only other author (aside from E. T. A. Hoffmann) to have more than one story included.

A surprising amount of fiction and nonfiction has been written about Kempelen's (later Maelzel's) automaton chess-player. I decided early in planning this anthology that I would avoid most of it. Much, like Poe's speculative article "Maelzel's Chess-Player," is more concerned with debunking of the automaton than with the public's reaction to it. "Maelzel's" is included to be representative of these, by one of the more vocal authors of his time. Published in 1836 in the *Southern Literary Messenger*, it is a taste of the reasoning Poe would later use in ratiocination tales such as "Murders in the Rue Morgue." It is the only work of nonfiction included.

"The Man That Was Used Up" is one of Poe's lesser known tales. The story, originally published in 1839 in *Burton's Gentleman's Magazine*, is generally read as a satire of the modern military man—a man completely defined by his achievements—but it's curious that Poe chooses such an unnatural state for Brevet Brigadier General John A. B. C. Smith. In an echo of Hoffmann's uncanny/counterfeit humanity, when our narrator asks about the General, he seems to slip from the characters' minds as though they are fundamentally trying to avoid the very thought of him.



# "Maelzel's Chess-Player"

Edgar Allan Poe

(1836)

Perhaps no exhibition of the kind has ever elicited so general attention as the Chess-Player of Maelzel. Wherever seen it has been an object of intense curiosity, to all persons who think. Yet the question of its *modus operandi* is still undetermined. Nothing has been written on this topic which can be considered as decisive—and accordingly we find every where men of mechanical genius, of great general acuteness, and discriminative understanding, who make no scruple in pronouncing the Automaton a *pure machine*, unconnected with human agency in its movements, and consequently, beyond all comparison, the most astonishing of the inventions of mankind. And such it would undoubtedly be, were they right in their supposition. Assuming this hypothesis, it would be grossly absurd to compare with the Chess-Player, any similar thing of either modern or ancient days. Yet there have been many and wonderful automata. In Brewster's *Letters on Natural Magic*, we have an account of the most remarkable. Among these may be mentioned, as having beyond doubt existed, firstly, the coach invented by M. Camus for the amusement of Louis XIV when a child. A table, about four feet square, was introduced, into the room appropriated for the exhibition. Upon this table was placed a carriage, six inches in length, made of wood, and drawn by two horses of the same material. One window being down, a lady was seen on the back seat. A coachman held the reins on the box, and a footman and page were in their places behind. M. Camus now touched a spring; whereupon the coachman smacked his whip, and the horses proceeded in a natural manner, along the edge of the table, drawing after them the carriage. Having gone as far as possible in this direction, a sudden turn was made to the left, and the vehicle was driven at right angles to its former course, and still closely along the edge of the table. In this way the coach proceeded until it arrived opposite the chair of the young prince. It then stopped, the page descended and opened the door, the lady alighted, and presented a petition to her sovereign. She then re-entered. The page put up the steps, closed the door, and resumed his station. The coachman whipped

his horses, and the carriage was driven back to its original position.

The magician of M. Maillardet is also worthy of notice. We copy the following account of it from the *Letters* before mentioned of Dr. B., who derived his information principally from the Edinburgh Encyclopædia.

"One of the most popular pieces of mechanism which we have seen, is the Magician constructed by M. Maillardet, for the purpose of answering certain given questions. A figure, dressed like a magician, appears seated at the bottom of a wall, holding a wand in one hand, and a book in the other. A number of questions, ready prepared, are inscribed on oval medallions, and the spectator takes any of these he chooses, and to which he wishes an answer, and having placed it in a drawer ready to receive it, the drawer shuts with a spring till the answer is returned. The magician then arises from his seat, bows his head, describes circles with his wand, and consulting the book as if in deep thought, he lifts it towards his face. Having thus appeared to ponder over the proposed question, he raises his wand, and striking with it the wall above his head, two folding doors fly open, and display an appropriate answer to the question. The doors again close, the magician resumes his original position, and the drawer opens to return the medallion. There are twenty of these medallions, all containing different questions, to which the magician returns the most suitable and striking answers. The medallions are thin plates of brass, of an elliptical form, exactly resembling each other. Some of the medallions have a question inscribed on each side, both of which the magician answered in succession. If the drawer is shut without a medallion being put into it, the magician rises, consults his book, shakes his head, and resumes his seat. The folding doors remain shut, and the drawer is returned empty. If two medallions are put into the drawer together, an answer is returned only to the lower one. When the machinery is wound up, the movements continue about an hour, during which time about fifty questions may be answered. The inventor stated that the means by which the different medallions acted upon the machinery, so as to produce the proper answers to the questions which they contained, were extremely simple."

The duck of Vaucanson was still more remarkable. It was of the size of life, and so perfect an imitation of the living animal that all the spectators were deceived. It executed, says Brewster, all the natural movements and gestures, it ate and drank with avidity, performed all the quick motions of the head and throat which are peculiar to the duck, and like it muddled the water which it drank with its bill. It produced also the sound of quacking in the

most natural manner. In the anatomical structure the artist exhibited the highest skill. Every bone in the real duck had its representative in the automaton, and its wings were anatomically exact. Every cavity, apophysis, and curvature was imitated, and each bone executed its proper movements. When corn was thrown down before it, the duck stretched out its neck to pick it up, swallowed, and digested it.[1]

But if these machines were ingenious, what shall we think of the calculating machine of Mr. Babbage? What shall we think of an engine of wood and metal which can not only compute astronomical and navigation tables to any given extent, but render the exactitude of its operations mathematically certain through its power of correcting its possible errors? What shall we think of a machine which can not only accomplish all this, but actually print off its elaborate results, when obtained, without the slightest intervention of the intellect of man? It will, perhaps, be said, in reply, that a machine such as we have described is altogether above comparison with the Chess-Player of Maelzel. By no means—it is altogether beneath it—that is to say provided we assume (what should never for a moment be assumed) that the Chess-Player is a *pure machine*, and performs its operations without any immediate human agency. Arithmetical or algebraical calculations are, from their very nature, fixed and determinate. Certain *data* being given, certain results necessarily and inevitably follow. These results have dependence upon nothing, and are influenced by nothing but the *data* originally given. And the question to be solved proceeds, or should proceed, to its final determination, by a succession of unerring steps liable to no change, and subject to no modification. This being the case, we can without difficulty conceive the *possibility* of so arranging a piece of mechanism, that upon starting it in accordance with the *data* of the question to be solved, it should continue its movements regularly, progressively, and undeviatingly towards the required solution, since these movements, however complex, are never imagined to be otherwise than finite and determinate. But the case is widely different with the Chess-Player. With him there is no determinate progression. No one move in chess necessarily follows upon any one other. From no particular disposition of the men at one period of a game can we predicate their disposition at a different period. Let us place the *first move* in a game of chess, in juxtaposition with the *data* of an algebraical question, and their great difference will be immediately perceived. From the latter—from the *data*—the second step of the question, dependent thereupon, inevitably

follows. It is modelled by the *data*. It must be *thus* and not otherwise. But from the first move in the game of chess no especial second move follows of necessity. In the algebraical question, as it proceeds towards solution, the *certainty* of its operations remains altogether unimpaired. The second step having been a consequence of the *data*, the third step is equally a consequence of the second, the fourth of the third, the fifth of the fourth, and so on, and not possibly otherwise, to the end. But in proportion to the progress made in a game of chess, is the *uncertainty* of each ensuing move. A few moves having been made, *no* step is certain. Different spectators of the game would advise different moves. All is then dependent upon the variable judgment of the players. Now even granting (what should not be granted) that the movements of the Automaton Chess-Player were in themselves determinate, they would be necessarily interrupted and disarranged by the indeterminate will of his antagonist. There is then no analogy whatever between the operations of the Chess-Player, and those of the calculating machine of Mr. Babbage, and if we choose to call the former a *pure machine* we must be prepared to admit that it is, beyond all comparison, the most wonderful of the inventions of mankind. Its original projector, however, Baron Kempelen, had no scruple in declaring it to be a "very ordinary piece of mechanism—a *bagatelle* whose effects appeared so marvellous only from the boldness of the conception, and the fortunate choice of the methods adopted for promoting the illusion." But it is needless to dwell upon this point. It is quite certain that the operations of the Automaton are regulated by mind, and by nothing else. Indeed this matter is susceptible of a mathematical demonstration, *a priori*. The only question then is of the *manner* in which human agency is brought to bear. Before entering upon this subject it would be as well to give a brief history and description of the Chess-Player for the benefit of such of our readers as may never have had an opportunity of witnessing Mr. Maelzel's exhibition.



The Automaton Chess-Player was invented in 1769, by Baron Kempelen, a nobleman of Presburg in Hungary, who afterwards disposed of it, together with the secret of its operations, to its present possessor. Soon after its completion it was exhibited in Presburg, Paris, Vienna, and other continental cities. In 1783 and 1784, it was taken to London by Mr. Maelzel. Of late years it has visited the principal towns in the United States. Wherever seen, the most intense curiosity was excited by its appearance, and numerous have been the attempts, by men of all classes, to fathom the mystery of its evolutions. The cut above gives a tolerable representation of the figure as seen by the citizens of Richmond a few weeks ago. The right arm, however, should lie more at length upon the box, a chess board should appear upon it, and the cushion should not be seen while the pipe is held. Some immaterial alterations have been made in the costume of the player since it came into the possession of Maelzel—the plume, for example, was not originally worn.

At the hour appointed for exhibition, a curtain is withdrawn, or folding doors are thrown open, and the machine rolled to within about twelve feet of the nearest of the spectators, between whom and it (the machine) a rope is stretched. A figure is seen habited as a Turk, and seated, with its legs crossed, at a large box apparently of maple wood, which serves it as a table. The exhibiter will, if requested, roll the machine to any portion of the room, suffer it to remain altogether on any designated spot, or even shift its location repeatedly during the progress of a game. The bottom of the box is elevated considerably above the floor by means of the castors or brazen rollers on which it moves, a clear view of the surface immediately beneath the Automaton being thus afforded to the spectators. The chair on which the figure sits is affixed permanently to the box. On the top of this latter is a chessboard, also permanently affixed. The right arm of the Chess-Player is extended at full length before him, at right angles with his body, and lying, in

an apparently careless position, by the side of the board. The back of the hand is upwards. The board itself is eighteen inches square. The left arm of the figure is bent at the elbow, and in the left hand is a pipe. A green drapery conceals the back of the Turk, and falls partially over the front of both shoulders. To judge from the external appearance of the box, it is divided into five compartments—three cupboards of equal dimensions, and two drawers occupying that portion of the chest lying beneath the cupboards. The foregoing observations apply to the appearance of the Automaton upon its first introduction into the presence of the spectators.

Maelzel now informs the company that he will disclose to their view the mechanism of the machine. Taking from his pocket a bunch of keys he unlocks with one of them, door marked 1 in the cut above, and throws the cupboard fully open to the inspection of all present. Its whole interior is apparently filled with wheels, pinions, levers, and other machinery, crowded very closely together, so that the eye can penetrate but a little distance into the mass. Leaving this door open to its full extent, he goes now round to the back of the box, and raising the drapery of the figure, opens another door situated precisely in the rear of the one first opened. Holding a lighted candle at this door, and shifting the position of the whole machine repeatedly at the same time, a bright light is thrown entirely through the cupboard, which is now clearly seen to be full, completely full, of machinery. The spectators being satisfied of this fact, Maelzel closes the back door, locks it, takes the key from the lock, lets fall the drapery of the figure, and comes round to the front. The door marked 1, it will be remembered, is still open. The exhibiter now proceeds to open the drawer which lies beneath the cupboards at the bottom of the box—for although there are apparently two drawers, there is really only one—the two handles and two key holes being intended merely for ornament. Having opened this drawer to its full extent, a small cushion, and a set of chessmen, fixed in a frame work made to support them perpendicularly, are discovered. Leaving this drawer, as well as cupboard No. 1 open, Maelzel now unlocks door No. 2, and door No. 3, which are discovered to be folding doors, opening into one and the same compartment. To the right of this compartment, however, (that is to say the spectators' right) a small division, six inches wide, and filled with machinery, is partitioned off. The main compartment itself (in speaking of that portion of the box visible upon opening doors 2 and 3, we shall always call it the main compartment) is lined with dark cloth and contains no machinery whatever

beyond two pieces of steel, quadrant-shaped, and situated one in each of the rear top corners of the compartment. A small protuberance about eight inches square, and also covered with dark cloth, lies on the floor of the compartment near the rear corner on the spectators' left hand. Leaving doors No. 2 and No. 3 open as well as the drawer, and door No. 1, the exhibiter now goes round to the back of the main compartment, and, unlocking another door there, displays clearly all the interior of the main compartment, by introducing a candle behind it and within it. The whole box being thus apparently disclosed to the scrutiny of the company, Maelzel, still leaving the doors and drawer open, rolls the Automaton entirely round, and exposes the back of the Turk by lifting up the drapery. A door about ten inches square is thrown open in the loins of the figure, and a smaller one also in the left thigh. The interior of the figure, as seen through these apertures, appears to be crowded with machinery. In general, every spectator is now thoroughly satisfied of having beheld and completely scrutinized, at one and the same time, every individual portion of the Automaton, and the idea of any person being concealed in the interior, during so complete an exhibition of that interior, if ever entertained, is immediately dismissed as preposterous in the extreme.

M. Maelzel, having rolled the machine back into its original position, now informs the company that the Automaton will play a game of chess with any one disposed to encounter him. This challenge being accepted, a small table is prepared for the antagonist, and placed close by the rope, but on the spectators' side of it, and so situated as not to prevent the company from obtaining a full view of the Automaton. From a drawer in this table is taken a set of chessmen, and Maelzel arranges them generally, but not always, with his own hands, on the chess board, which consists merely of the usual number of squares painted upon the table. The antagonist having taken his seat, the exhibiter approaches the drawer of the box, and takes therefrom the cushion, which, after removing the pipe from the hand of the Automaton, he places under its left arm as a support. Then taking also from the drawer the Automaton's set of chessmen, he arranges them upon the chess board before the figure. He now proceeds to close the doors and to lock them—leaving the bunch of keys in door No. 1. He also closes the drawer, and, finally, winds up the machine, by applying a key to an aperture in the left end (the spectators' left) of the box. The game now commences—the Automaton taking the first move. The duration of the contest is usually limited to half an hour, but if it be not finished at the expiration of this period, and the antagonist still



contend that he can beat the Automaton, M. Maelzel has seldom any objection to continue it. Not to weary the company, is the ostensible, and no doubt the real object of the limitation. It will of course be understood that when a move is made at his own table, by the antagonist, the corresponding move is made at the box of the Automaton, by Maelzel himself, who then acts as the representative of the antagonist. On the other hand, when the Turk moves, the corresponding move is made at the table of the antagonist, also by M. Maelzel, who then acts as the representative of the Automaton. In this manner it is necessary that the exhibiter should often pass from one table to the other. He also frequently goes in rear of the figure to remove the chessmen which it has taken, and which it deposits, when taken, on the box to the left (to its own left) of the board. When the Automaton hesitates in relation to its move, the exhibiter is occasionally seen to place himself very near its right side, and to lay his hand, now and then, in a careless manner upon the box. He has also a peculiar shuffle with his feet, calculated to induce suspicion of collusion with the machine in minds which are more cunning than sagacious. These peculiarities are, no doubt, mere mannerisms of M. Maelzel, or, if he is aware of them at all, he puts them in practice with a view of exciting in the spectators a false idea of pure mechanism in the Automaton.

The Turk plays with his left hand. All the movements of the arm are at right angles. In this manner, the hand (which is gloved and bent in a natural way,) being brought directly above the piece to be moved, descends finally upon it, the fingers receiving it, in most cases, without difficulty. Occasionally, however, when the piece is not precisely in its proper situation, the Automaton fails in his attempt at seizing it. When this occurs, no second effort is made, but the arm continues its movement in the direction originally intended, precisely as if the piece were in the fingers. Having thus designated the spot whither the move should have been made, the arm returns to its cushion, and Maelzel performs the evolution which the Automaton pointed out. At every movement of the figure machinery is heard in motion. During the progress of the game, the figure now and then rolls its eyes, as if surveying the board, moves its head, and pronounces the word *echec* (check) when necessary.[2] If a false move be made by his antagonist, he raps briskly on the box with the fingers of his right hand, shakes his head roughly, and replacing the piece falsely moved, in its former situation, assumes the next move himself. Upon beating the game, he waves his head with an air of

triumph, looks round complacently upon the spectators, and drawing his left arm farther back than usual, suffers his fingers alone to rest upon the cushion. In general, the Turk is victorious—once or twice he has been beaten. The game being ended, Maelzel will again, if desired, exhibit the mechanism of the box, in the same manner as before. The machine is then rolled back, and a curtain hides it from the view of the company.

There have been many attempts at solving the mystery of the Automaton. The most general opinion in relation to it, an opinion too not unfrequently adopted by men who should have known better, was, as we have before said, that no immediate human agency was employed—in other words, that the machine was purely a machine and nothing else. Many, however maintained that the exhibiter himself regulated the movements of the figure by mechanical means operating through the feet of the box. Others again, spoke confidently of a magnet. Of the first of these opinions we shall say nothing at present more than we have already said. In relation to the second it is only necessary to repeat what we have before stated, that the machine is rolled about on castors, and will, at the request of a spectator, be moved to and fro to any portion of the room, even during the progress of a game. The supposition of the magnet is also untenable—for if a magnet were the agent, any other magnet in the pocket of a spectator would disarrange the entire mechanism. The exhibiter, however, will suffer the most powerful loadstone to remain even upon the box during the whole of the exhibition.

The first attempt at a written explanation of the secret, at least the first attempt of which we ourselves have any knowledge, was made in a large pamphlet printed at Paris in 1785. The author's hypothesis amounted to this—that a dwarf actuated the machine. This dwarf he supposed to conceal himself during the opening of the box by thrusting his legs into two hollow cylinders, which were represented to be (but which are not) among the machinery in the cupboard No. 1, while his body was out of the box entirely, and covered by the drapery of the Turk. When the doors were shut, the dwarf was enabled to bring his body within the box—the noise produced by some portion of the machinery allowing him to do so unheard, and also to close the door by which he entered. The interior of the Automaton being then exhibited, and no person discovered, the spectators, says the author of this pamphlet, are satisfied that no one is within any portion of the machine. This whole hypothesis was too obviously absurd to require comment, or refutation, and accordingly we find that it attracted very little attention.

In 1789 a book was published at Dresden by M. I. F. Freyhere in which another endeavor was made to unravel the mystery. Mr. Freyhere's book was a pretty large one, and copiously illustrated by colored engravings. His supposition was that "a well-taught boy very thin and tall of his age (sufficiently so that he could be concealed in a drawer almost immediately under the chessboard)" played the game of chess and effected all the evolutions of the Automaton. This idea, although even more silly than that of the Parisian author, met with a better reception, and was in some measure believed to be the true solution of the wonder, until the inventor put an end to the discussion by suffering a close examination of the top of the box.

These bizarre attempts at explanation were followed by others equally bizarre. Of late years however, an anonymous writer, by a course of reasoning exceedingly unphilosophical, has contrived to blunder upon a plausible solution—although we cannot consider it altogether the true one. His Essay was first published in a Baltimore weekly paper, was illustrated by cuts, and was entitled "An attempt to analyze the Automaton Chess-Player of M. Maelzel." This Essay we suppose to have been the original of the *pamphlet* to which Sir David Brewster alludes in his letters on Natural Magic, and which he has no hesitation in declaring a thorough and satisfactory explanation. The *results* of the analysis are undoubtedly, in the main, just; but we can only account for Brewster's pronouncing the Essay a thorough and satisfactory explanation, by supposing him to have bestowed upon it a very cursory and inattentive perusal. In the compendium of the Essay, made use of in the Letters on Natural Magic, it is quite impossible to arrive at any distinct conclusion in regard to the adequacy or inadequacy of the analysis, on account of the gross misarrangement and deficiency of the letters of reference employed. The same fault is to be found in the "Attempt &c," as we originally saw it. The solution consists in a series of minute explanations, (accompanied by woodcuts, the whole occupying many pages) in which the object is to show the *possibility* of so *shifting the partitions* of the box, as to allow a human being, concealed in the interior, to move portions of his body from one part of the box to another, during the exhibition of the mechanism—thus eluding the scrutiny of the spectators. There can be no doubt, as we have before observed, and as we will presently endeavor to show, that the principle, or rather the result, of this solution is the true one. Some person is concealed in the box during the whole time of exhibiting the interior. We object, however, to the whole verbose description of the *manner* in which the

partitions are shifted, to accommodate the movements of the person concealed. We object to it as a mere theory assumed in the first place, and to which circumstances are afterwards made to adapt themselves. It was not, and could not have been, arrived at by any inductive reasoning. In whatever way the shifting is managed, it is of course concealed at every step from observation. To show that certain movements might possibly be effected in a certain way, is very far from showing that they are actually so effected. There may be an infinity of other methods by which the same results may be obtained. The probability of the one assumed proving the correct one is then as unity to infinity. But, in reality, this particular point, the shifting of the partitions, is of no consequence whatever. It was altogether unnecessary to devote seven or eight pages for the purpose of proving what no one in his senses would deny—viz: that the wonderful mechanical genius of Baron Kempelen could invent the necessary means for shutting a door or slipping aside a panel, with a human agent too at his service in actual contact with the panel or the door, and the whole operations carried on, as the author of the Essay himself shows, and as we shall attempt to show more fully hereafter, entirely out of reach of the observation of the spectators.

In attempting ourselves an explanation of the Automaton, we will, in the first place, endeavor to show how its operations are effected, and afterwards describe, as briefly as possible, the nature of the *observations* from which we have deduced our result.

It will be necessary for a proper understanding of the subject, that we repeat here in a few words, the routine adopted by the exhibiter in disclosing the interior of the box—a routine from which he *never* deviates in any material particular. In the first place he opens the door No. 1. Leaving this open, he goes round to the rear of the box, and opens a door precisely at the back of door No. 1. To this back door he holds a lighted candle. He then *closes the back door*, locks it, and, coming round to the front, opens the drawer to its full extent. This done, he opens the doors No. 2 and No. 3, (the folding doors) and displays the interior of the main compartment. Leaving open the main compartment, the drawer, and the front door of cupboard No. 1, he now goes to the rear again, and throws open the back door of the main compartment. In shutting up the box no particular order is observed, except that the folding doors are always closed before the drawer.

Now, let us suppose that when the machine is first rolled into the presence of the spectators, a man is already within it. His body is situated

behind the dense machinery in cupboard No. 1, (the rear portion of which machinery is so contrived as to slip *en masse*, from the main compartment to the cupboard No. 1, as occasion may require,) and his legs lie at full length in the main compartment. When Maelzel opens the door No. 1, the man within is not in any danger of discovery, for the keenest eye cannot penetrate more than about two inches into the darkness within. But the case is otherwise when the back door of the cupboard No. 1, is opened. A bright light then pervades the cupboard, and the body of the man would be discovered if it were there. But it is not. The putting the key in the lock of the back door was a signal on hearing which the person concealed brought his body forward to an angle as acute as possible—throwing it altogether, or nearly so, into the main compartment. This, however, is a painful position, and cannot be long maintained. Accordingly we find that Maelzel *closes the back door*. This being done, there is no reason why the body of the man may not resume its former situation—for the cupboard is again so dark as to defy scrutiny. The drawer is now opened, and the legs of the person within drop down behind it in the space it formerly occupied.<sup>[3]</sup> There is, consequently, now no longer any part of the man in the main compartment—his body being behind the machinery in cupboard No. 1, and his legs in the space occupied by the drawer. The exhibiter, therefore, finds himself at liberty to display the main compartment. This he does—opening both its back and front doors—and no person is discovered. The spectators are now satisfied that the whole of the box is exposed to view—and exposed too, all portions of it at one and the same time. But of course this is not the case. They neither see the space behind the drawer, nor the interior of cupboard No. 1—the front door of which latter the exhibiter virtually shuts in shutting its back door. Maelzel, having now rolled the machine around, lifted up the drapery of the Turk, opened the doors in his back and thigh, and shown his trunk to be full of machinery, brings the whole back into its original position, and closes the doors. The man within is now at liberty to move about. He gets up into the body of the Turk just so high as to bring his eyes above the level of the chess board. It is very probable that he seats himself upon the little square block or protuberance which is seen in a corner of the main compartment when the doors are open. In this position he sees the chessboard through the bosom of the Turk which is of gauze. Bringing his right arm across his breast he actuates the little machinery necessary to guide the left arm and the fingers of the figure. This machinery is situated just beneath the left shoulder of the

Turk, and is consequently easily reached by the right hand of the man concealed, if we suppose his right arm brought across the breast. The motions of the head and eyes, and of the right arm of the figure, as well as the sound *echec* are produced by other mechanism in the interior, and actuated at will by the man within. The whole of this mechanism—that is to say all the mechanism essential to the machine—is most probably contained within the little cupboard (of about six inches in breadth) partitioned off at the right (the spectators' right) of the main compartment.

In this analysis of the operations of the Automaton, we have purposely avoided any allusion to the manner in which the partitions are shifted, and it will now be readily comprehended that this point is a matter of no importance, since, by mechanism within the ability of any common carpenter, it might be effected in an infinity of different ways, and since we have shown that, however performed, it is performed out of the view of the spectators. Our result is founded upon the following *observations* taken during frequent visits to the exhibition of Maelzel.[\[4\]](#)

1. The moves of the Turk are not made at regular intervals of time, but accommodate themselves to the moves of the antagonist—although this point (of regularity) so important in all kinds of mechanical contrivance, might have been readily brought about by limiting the time allowed for the moves of the antagonist. For example, if this limit were three minutes, the moves of the Automaton might be made at any given intervals longer than three minutes. The fact then of irregularity, when regularity might have been so easily attained, goes to prove that regularity is unimportant to the action of the Automaton—in other words, that the Automaton is not a *pure machine*.

2. When the Automaton is about to move a piece, a distinct motion is observable just beneath the left shoulder, and which motion agitates in a slight degree, the drapery covering the front of the left shoulder. This motion invariably precedes, by about two seconds, the movement of the arm itself—and the arm never, in any instance, moves without this preparatory motion in the shoulder. Now let the antagonist move a piece, and let the corresponding move be made by Maelzel, as usual, upon the board of the Automaton. Then let the antagonist narrowly watch the Automaton, until he detect the preparatory motion in the shoulder. Immediately upon detecting this motion, and before the arm itself begins to move, let him withdraw his piece, as if perceiving an error in his maneuver. It will then be seen that the movement of the arm, which, in all other cases, immediately succeeds the motion in the

shoulder, is withheld—is not made—although Maelzel has not yet performed, on the board of the Automaton, any move corresponding to the withdrawal of the antagonist. In this case, that the Automaton was about to move is evident—and that he did not move, was an effect plainly produced by the withdrawal of the antagonist, and without any intervention of Maelzel.

This fact fully proves, 1— that the intervention of Maelzel, in performing the moves of the antagonist on the board of the Automaton, is not essential to the movements of the Automaton, 2— that its movements are regulated by mind—by some person who sees the board of the antagonist, 3— that its movements are not regulated by the mind of Maelzel, whose back was turned towards the antagonist at the withdrawal of his move.

3. The Automaton does not invariably win the game. Were the machine a pure machine this would not be the case—it would always win. The *principle* being discovered by which a machine can be made to *play* a game of chess, an extension of the same principle would enable it to *win* a game—a farther extension would enable it to win *all* games—that is, to beat any possible game of an antagonist. A little consideration will convince any one that the difficulty of making a machine beat all games, is not in the least degree greater, as regards the principle of the operations necessary, than that of making it beat a single game. If then we regard the Chess-Player as a machine, we must suppose, (what is highly improbable,) that its inventor preferred leaving it incomplete to perfecting it—a supposition rendered still more absurd, when we reflect that the leaving it incomplete would afford an argument against the possibility of its being a pure machine—the very argument we now adduce.

4. When the situation of the game is difficult or complex, we never perceive the Turk either shake his head or roll his eyes. It is only when his next move is obvious, or when the game is so circumstanced that to a man in the Automaton's place there would be no necessity for reflection. Now these peculiar movements of the head and eyes are movements customary with persons engaged in meditation, and the ingenious Baron Kempelen would have adapted these movements (were the machine a pure machine) to occasions proper for their display—that is, to occasions of complexity. But the reverse is seen to be the case, and this reverse applies precisely to our supposition of a man in the interior. When engaged in meditation about the game he has no time to think of setting in motion the mechanism of the Automaton by which are moved the head and the eyes. When the game,

however, is obvious, he has time to look about him, and, accordingly, we see the head shake and the eyes roll.

5. When the machine is rolled round to allow the spectators an examination of the back of the Turk, and when his drapery is lifted up and the doors in the trunk and thigh thrown open, the interior of the trunk is seen to be crowded with machinery. In scrutinizing this machinery while the Automaton was in motion, that is to say while the whole machine was moving on the castors, it appeared to us that certain portions of the mechanism changed their shape and position in a degree too great to be accounted for by the simple laws of perspective; and subsequent examinations convinced us that these undue alterations were attributable to mirrors in the interior of the trunk. The introduction of mirrors among the machinery could not have been intended to influence, in any degree, the machinery itself. Their operation, whatever that operation should prove to be, must necessarily have reference to the eye of the spectator. We at once concluded that these mirrors were so placed to multiply to the vision some few pieces of machinery within the trunk so as to give it the appearance of being crowded with mechanism. Now the direct inference from this is that the machine is not a pure machine. For if it were, the inventor, so far from wishing its mechanism to appear complex, and using deception for the purpose of giving it this appearance, would have been especially desirous of convincing those who witnessed his exhibition, of the *simplicity* of the means by which results so wonderful were brought about.

6. The external appearance, and, especially, the deportment of the Turk, are, when we consider them as imitations of *life*, but very indifferent imitations. The countenance evinces no ingenuity, and is surpassed, in its resemblance to the human face, by the very commonest of waxworks. The eyes roll unnaturally in the head, without any corresponding motions of the lids or brows. The arm, particularly, performs its operations in an exceedingly stiff, awkward, jerking, and rectangular manner. Now, all this is the result either of inability in Maelzel to do better, or of intentional neglect—accidental neglect being out of the question, when we consider that the whole time of the ingenious proprietor is occupied in the improvement of his machines. Most assuredly we must not refer the unlife-like appearances to inability—for all the rest of Maelzel's automata are evidence of his full ability to copy the motions and peculiarities of life with the most wonderful exactitude. The rope dancers, for example, are inimitable. When the clown



laughs, his lips, his eyes, his eyebrows, and eyelids—indeed, all the features of his countenance—are imbued with their appropriate expressions. In both him and his companion, every gesture is so entirely easy, and free from the semblance of artificiality, that, were it not for the diminutiveness of their size, and the fact of their being passed from one spectator to another previous to their exhibition on the rope, it would be difficult to convince any assemblage of persons that these wooden automata were not living creatures. We cannot, therefore, doubt Mr. Maelzel's ability, and we must necessarily suppose that he intentionally suffered his Chess-Player to remain the same artificial and unnatural figure which Baron Kempelen (no doubt also through design) originally made it. What this design was it is not difficult to conceive. Were the Automaton life-like in its motions, the spectator would be more apt to attribute its operations to their true cause, (that is, to human agency within) than he is now, when the awkward and rectangular maneuver convey the idea of pure and unaided mechanism.

7. When, a short time previous to the commencement of the game, the Automaton is wound up by the exhibiter as usual, an ear in any degree accustomed to the sounds produced in winding up a system of machinery, will not fail to discover, instantaneously, that the axis turned by the key in the box of the Chess-Player, cannot possibly be connected with either a weight, a spring, or any system of machinery whatever. The inference here is the same as in our last observation. The winding up is inessential to the operations of the Automaton, and is performed with the design of exciting in the spectators the false idea of mechanism.

8. When the question is demanded explicitly of Maelzel—"Is the Automaton a pure machine or not?" his reply is invariably the same—"I will say nothing about it." Now the notoriety of the Automaton, and the great curiosity it has every where excited, are owing more especially to the prevalent opinion that it *is* a pure machine, than to any other circumstance. Of course, then, it is the interest of the proprietor to represent it as a pure machine. And what more obvious, and more effectual method could there be of impressing the spectators with this desired idea, than a positive and explicit declaration to that effect? On the other hand, what more obvious and effectual method could there be of exciting a disbelief in the Automaton's being a pure machine, than by withholding such explicit declaration? For, people will naturally reason thus,—It is Maelzel's interest to represent this thing a pure machine—he refuses to do so, directly, in words, although he

does not scruple, and is evidently anxious to do so, indirectly by actions—were it actually what he wishes to represent it by actions, he would gladly avail himself of the more direct testimony of words—the inference is, that a consciousness of its *not* being a pure machine, is the reason of his silence—his actions cannot implicate him in a falsehood—his words may.

9. When, in exhibiting the interior of the box, Maelzel has thrown open the door No. 1, and also the door immediately behind it, he holds a lighted candle at the back door (as mentioned above) and moves the entire machine to and fro with a view of convincing the company that the cupboard No. 1 is entirely filled with machinery. When the machine is thus moved about, it will be apparent to any careful observer, that whereas that portion of the machinery near the front door No. 1, is perfectly steady and unwavering, the portion farther within fluctuates, in a very slight degree, with the movements of the machine. This circumstance first aroused in us the suspicion that the more remote portion of the machinery was so arranged as to be easily slipped, *en masse*, from its position when occasion should require it. This occasion we have already stated to occur when the man concealed within brings his body into an erect position upon the closing of the back door.

10. Sir David Brewster states the figure of the Turk to be of the size of life—but in fact it is far above the ordinary size. Nothing is more easy than to err in our notions of magnitude. The body of the Automaton is generally insulated, and, having no means of immediately comparing it with any human form, we suffer ourselves to consider it as of ordinary dimensions. This mistake may, however, be corrected by observing the Chess-Player when, as is sometimes the case, the exhibiter approaches it. Mr. Maelzel, to be sure, is not very tall, but upon drawing near the machine, his head will be found at least eighteen inches below the head of the Turk, although the latter, it will be remembered, is in a sitting position.

11. The box behind which the Automaton is placed, is precisely three feet six inches long, two feet four inches deep, and two feet six inches high. These dimensions are fully sufficient for the accommodation of a man very much above the common size—and the main compartment alone is capable of holding any ordinary man in the position we have mentioned as assumed by the person concealed. As these are facts, which any one who doubts them may prove by actual calculation, we deem it unnecessary to dwell upon them. We will only suggest that, although the top of the box is apparently a board of about three inches in thickness, the spectator may satisfy himself by

stooping and looking up at it when the main compartment is open, that it is in reality very thin. The height of the drawer also will be misconceived by those who examine it in a cursory manner. There is a space of about three inches between the top of the drawer as seen from the exterior, and the bottom of the cupboard—a space which must be included in the height of the drawer. These contrivances to make the room within the box appear less than it actually is, are referrible to a design on the part of the inventor, to impress the company again with a false idea, viz. that no human being can be accommodated within the box.

12. The interior of the main compartment is lined throughout with *cloth*. This cloth we suppose to have a twofold object. A portion of it may form, when tightly stretched, the only partitions which there is any necessity for removing during the changes of the man's position, viz: the partition between the rear of the main compartment and the rear of the cupboard No. 1, and the partition between the main compartment, and the space behind the drawer when open. If we imagine this to be the case, the difficulty of shifting the partitions vanishes at once, if indeed any such difficulty could be supposed under any circumstances to exist. The second object of the cloth is to deaden and render indistinct all sounds occasioned by the movements of the person within.

13. The antagonist (as we have before observed) is not suffered to play at the board of the Automaton, but is seated at some distance from the machine. The reason which, most probably, would be assigned for this circumstance, if the question were demanded, is, that were the antagonist otherwise situated, his person would intervene between the machine and the spectators, and preclude the latter from a distinct view. But this difficulty might be easily obviated, either by elevating the seats of the company, or by turning the end of the box towards them during the game. The true cause of the restriction is, perhaps, very different. Were the antagonist seated in contact with the box, the secret would be liable to discovery, by his detecting, with the aid of a quick ear, the breathings of the man concealed.

14. Although M. Maelzel, in disclosing the interior of the machine, sometimes slightly deviates from the *routine* which we have pointed out, yet *never* in any instance does he so deviate from it as to interfere with our solution. For example, he has been known to open, first of all, the drawer—but he never opens the main compartment without first closing the back door of cupboard No. 1—he never opens the main compartment without first

pulling out the drawer—he never shuts the drawer without first shutting the main compartment—he never opens the back door of cupboard No. 1 while the main compartment is open—and the game of chess is never commenced until the whole machine is closed. Now, if it were observed that *never*, in any single instance, did M. Maelzel differ from the routine we have pointed out as necessary to our solution, it would be one of the strongest possible arguments in corroboration of it—but the argument becomes infinitely strengthened if we duly consider the circumstance that he *does occasionally* deviate from the routine, but never does so deviate as to falsify the solution.

15. There are six candles on the board of the Automaton during exhibition. The question naturally arises—"Why are so many employed, when a single candle, or, at farthest, two, would have been amply sufficient to afford the spectators a clear view of the board, in a room otherwise so well lit up as the exhibition room always is—when, moreover, if we suppose the machine a *pure machine*, there can be no necessity for so much light, or indeed any light at all, to enable *it* to perform its operations—and when, especially, only a single candle is placed upon the table of the antagonist?" The first and most obvious inference is, that so strong a light is requisite to enable the man within to see through the transparent material (probably fine gauze) of which the breast of the Turk is composed. But when we consider the *arrangement* of the candles, another reason immediately presents itself. There are six lights (as we have said before) in all. Three of these are on each side of the figure. Those most remote from the spectators are the longest—those in the middle are about two inches shorter—and those nearest the company about two inches shorter still—and the candles on one side differ in height from the candles respectively opposite on the other, by a ratio different from two inches—that is to say, the longest candle on one side is about three inches shorter than the longest candle on the other, and so on. Thus it will be seen that no two of the candles are of the same height, and thus also the difficulty of ascertaining the *material* of the breast of the figure (against which the light is especially directed) is greatly augmented by the dazzling effect of the complicated crossings of the rays—crossings which are brought about by placing the centres of radiation all upon different levels.

16. While the Chess-Player was in possession of Baron Kempelen, it was more than once observed, first, that an Italian in the suite of the Baron was never visible during the playing of a game at chess by the Turk, and, secondly, that the Italian being taken seriously ill, the exhibition was

suspended until his recovery. This Italian professed a *total* ignorance of the game of chess, although all others of the suite played well. Similar observations have been made since the Automaton has been purchased by Maelzel. There is a man, *Schlumberger*, who attends him wherever he goes, but who has no ostensible occupation other than that of assisting in the packing and unpacking of the automata. This man is about the medium size, and has a remarkable stoop in the shoulders. Whether he professes to play chess or not, we are not informed. It is quite certain, however, that he is never to be seen during the exhibition of the Chess-Player, although frequently visible just before and just after the exhibition. Moreover, some years ago Maelzel visited Richmond with his automata, and exhibited them, we believe, in the house now occupied by M. Bossieux as a Dancing Academy. *Schlumberger* was suddenly taken ill, and during his illness there was no exhibition of the Chess-Player. These facts are well known to many of our citizens. The reason assigned for the suspension of the Chess-Player's performances, was *not* the illness of *Schlumberger*. The inferences from all this we leave, without farther comment, to the reader.

17. The Turk plays with his *left* arm. A circumstance so remarkable cannot be accidental. Brewster takes no notice of it whatever, beyond a mere statement, we believe, that such is the fact. The early writers of treatises on the Automaton, seem not to have observed the matter at all, and have no reference to it. The author of the pamphlet alluded to by Brewster, mentions it, but acknowledges his inability to account for it. Yet it is obviously from such prominent discrepancies or incongruities as this that deductions are to be made (if made at all) which shall lead us to the truth.

The circumstance of the Automaton's playing with his left hand cannot have connexion with the operations of the machine, considered merely as such. Any mechanical arrangement which would cause the figure to move, in any given manner, the left arm—could, if reversed, cause it to move, in the same manner, the right. But these principles cannot be extended to the human organization, wherein there is a marked and radical difference in the construction, and, at all events, in the powers, of the right and left arms. Reflecting upon this latter fact, we naturally refer the incongruity noticeable in the Chess-Player to this peculiarity in the human organization. If so, we must imagine some *reversion*—for the Chess-Player plays precisely as a man *would not*. These ideas, once entertained, are sufficient of themselves, to suggest the notion of a man in the interior. A few more imperceptible steps

lead us, finally, to the result. The Automaton plays with his left arm, because under no other circumstances could the man within play with his right—a *desideratum* of course. Let us, for example, imagine the Automaton to play with his right arm. To reach the machinery which moves the arm, and which we have before explained to lie just beneath the shoulder, it would be necessary for the man within either to use his right arm in an exceedingly painful and awkward position, (viz. brought up close to his body and tightly compressed between his body and the side of the Automaton,) or else to use his left arm brought across his breast. In neither case could he act with the requisite ease or precision. On the contrary, the Automaton playing, as it actually does, with the left arm, all difficulties vanish. The right arm of the man within is brought across his breast, and his right fingers act, without any constraint, upon the machinery in the shoulder of the figure.

We do not believe that any reasonable objections can be urged against this solution of the Automaton Chess-Player.

### Footnotes for "Maelzel's Chess-Player":

[1] Under the head *Androides* in the Edinburgh Encyclopædia may be found a full account of the principal automata of ancient and modern times.

[2] The making the Turk pronounce the word *echec*, is an improvement by M. Maelzel. When in possession of Baron Kempelen, the figure indicated a *check* by rapping on the box with his right hand.

[3] Sir David Brewster supposes that there is always a large space behind this drawer even when shut—in other words that the drawer is a "false drawer," and does not extend to the back of the box. But the idea is altogether untenable. So commonplace a trick would be immediately discovered—especially as the drawer is always opened to its full extent, and an opportunity thus afforded of comparing its depth with that of the box.

[4] Some of these *observations* are intended merely to prove that the machine must be regulated by *mind*, and it may be thought a work of supererogation to advance farther arguments in support of what has been already fully decided. But our object is to convince, in especial, certain of our friends upon whom a train of suggestive reasoning will have more influence than the most positive *a priori* demonstration.

# "The Man that Was Used Up"

A Tale of the Last Bugaboo and Kickapoo Campaign

Edgar Allan Poe

(1839)

*Pleurez, pleurez, mes yeux, et fondez-vous en eau!*

*La moitié de ma vie a mis l' autre au tombeau.*

– Corneille

I cannot just now remember when or where I first made the acquaintance of that truly fine-looking fellow, Brevet Brigadier General John A. B. C. Smith. Some one did introduce me to the gentleman, I am sure—at some public meeting, I know very well—held about something of great importance, no doubt—at some place or other, I feel convinced,—whose name I have unaccountably forgotten. The truth is—that the introduction was attended, upon my part, with a degree of anxious embarrassment which operated to prevent any definite impressions of either time or place. I am constitutionally nervous—this, with me, is a family failing, and I can't help it. In especial, the slightest appearance of mystery—of any point I cannot exactly comprehend—puts me at once into a pitiable state of agitation.

There was something, as it were, remarkable—yes, *remarkable*, although this is but a feeble term to express my full meaning—about the entire individuality of the personage in question. He was, perhaps, six feet in height, and of a presence singularly commanding. There was an *air distingué* pervading the whole man, which spoke of high breeding, and hinted at high birth. Upon this topic—the topic of Smith's personal appearance—I have a kind of melancholy satisfaction in being minute. His head of hair would have done honor to a Brutus;—nothing could be more richly flowing, or possess a brighter gloss. It was of a jetty black;—which was also the color, or more properly the no color, of his unimaginable whiskers. You perceive I cannot speak of these latter without enthusiasm; it is not too much to say that they were the handsomest pair of whiskers under the sun. At all events, they encircled, and at times partially overshadowed, a mouth utterly unequalled.



Here were the most entirely even, and the most brilliantly white of all conceivable teeth. From between them, upon every proper occasion, issued a voice of surpassing clearness, melody, and strength. In the matter of eyes, also, my acquaintance was preeminently endowed. Either one of such a pair was worth a couple of the ordinary ocular organs. They were of a deep hazel, exceedingly large and lustrous; and there was perceptible about them, ever and anon, just that amount of interesting obliquity which gives pregnancy to expression.

The bust of the General was unquestionably the finest bust I ever saw. For your life you could not have found a fault with its wonderful proportion. This rare peculiarity set off to great advantage a pair of shoulders which would have called up a blush of conscious inferiority into the countenance of the marble Apollo. I have a passion for fine shoulders, and may say that I never beheld them in perfection before. The arms altogether were admirably modelled. Nor were the lower limbs less superb. These were, indeed, the *ne plus ultra* of good legs. Every connoisseur in such matters admitted the legs to be good. There was neither too much flesh, nor too little,—neither rudeness nor fragility. I could not imagine a more graceful curve than that of the *os femoris*, and there was just that due gentle prominence in the rear of the *fibula* which goes to the conformation of a properly proportioned calf. I wish to God my young and talented friend Chiponchipino, the sculptor, had but seen the legs of Brevet Brigadier General John A. B. C. Smith.

But although men so absolutely fine-looking are neither as plenty as reasons or blackberries, still I could not bring myself to believe that *the remarkable* something to which I alluded just now,—that the odd air of *je ne sais quoi* which hung about my new acquaintance,—lay altogether, or indeed at all, in the supreme excellence of his bodily endowments. Perhaps it might be traced to the *manner*;—yet here again I could not pretend to be positive. There was a primness, not to say stiffness, in his carriage—a degree of measured, and, if I may so express it, of rectangular precision, attending his every movement, which, observed in a more diminutive figure, would have had the least little savor in the world, of affectation, pomposity or constraint, but which noticed in a gentleman of his undoubted dimensions, was readily placed to the account of reserve, *hauteur*—of a commendable sense, in short, of what is due to the dignity of colossal proportion.

The kind friend who presented me to General Smith whispered in my ear some few words of comment upon the man. He was a *remarkable* man—

a very remarkable man—indeed one of the *most* remarkable men of the age. He was an especial favorite, too, with the ladies—chiefly on account of his high reputation for courage.

"In *that* point he is unrivalled—indeed he is a perfect desperado—a downright fire eater, and no mistake," said my friend, here dropping his voice excessively low, and thrilling me with the mystery of his tone.

"A downright fire eater, and *no* mistake. Showed *that*, I should say, to some purpose, in the late tremendous swamp-fight away down South, with the Bugaboo and Kickapoo Indians." [Here my friend opened his eyes to some extent.] "Bless my soul!—blood and thunder, and all that!—*prodigies* of valor!—heard of him of course?—you know he's the man—"

"Man alive, how *do* you do? why how *are* ye? very glad to see ye, indeed!" here interrupted the General himself, seizing my companion by the hand as he drew near, and bowing stiffly but profoundly, as I was presented. I then thought, (and I think so still,) that I never heard a clearer nor a stronger voice nor beheld a finer set of teeth: but I *must* say that I was sorry for the interruption just at that moment, as, owing to the whispers and insinuations aforesaid, my interest had been greatly excited in the hero of the Bugaboo and Kickapoo campaign.

However, the delightfully luminous conversation of Brevet Brigadier General John A. B. C. Smith soon completely dissipated this chagrin. My friend leaving us immediately, we had quite a long *tête-à-tête*, and I was not only pleased but *really*—instructed. I never heard a more fluent talker, or a man of greater general information. With becoming modesty, he forebore, nevertheless, to touch upon the theme I had just then most at heart—I mean the mysterious circumstances attending the Bugaboo war—and, on my own part, what I conceive to be a proper sense of delicacy forbade me to broach the subject; although, in truth, I was exceedingly tempted to do so. I perceived, too, that the gallant soldier preferred topics of philosophical interest, and that he delighted, especially, in commenting upon the rapid march of mechanical invention. Indeed, lead him where I would, this was a point to which he invariably came back.

"There is nothing at all like it," he would say; "we are a wonderful people, and live in a wonderful age. Parachutes and railroads—man-traps and spring-guns! Our steamboats are upon every sea, and the Nassau balloon packet is about to run regular trips (fare either way only twenty pounds sterling) between London and Timbuctoo. And who shall calculate the

immense influence upon social life—upon arts—upon commerce—upon literature—which will be the immediate result of the great principles of electro magnetism! Nor, is this all, let me assure you! There is really no end to the march of invention. The most wonderful—the most ingenious—and let me add, Mr.—Mr.—Thompson, I believe, is your name—let me add, I say, the most *useful*—the most truly *useful* mechanical contrivances, are daily springing up like mushrooms, if I may so express myself, or, more figuratively, like—ah—grasshoppers—like grasshoppers, Mr. Thompson—about us and all—ah—ah—around us!"

Thompson, to be sure, is not my name; but it is needless to say that I left General Smith with a heightened interest in the man, with an exalted opinion of his conversational powers, and a deep sense of the valuable privileges we enjoy in living in this age of mechanical invention. My curiosity, however, had not been altogether satisfied, and I resolved to prosecute immediate inquiry among my acquaintances touching the Brevet Brigadier General himself, and particularly respecting the tremendous events *quorum pars magna fuit*, during the Bugaboo and Kickapoo campaign.

The first opportunity which presented itself, and which (*horresco referens*) I did not in the least scruple to seize, occurred at the Church of the Reverend Doctor Drummumpp, where I found myself established, one Sunday, just at sermon time, not only in the pew, but by the side, of that worthy and communicative little friend of mine, Miss Tabitha T. Thus seated, I congratulated myself, and with much reason, upon the very flattering state of affairs. If any person knew anything about Brevet Brigadier General John A. B. C. Smith, that person, it was clear to me, was Miss Tabitha T. We telegraphed a few signals, and then commenced, *sotto voce*, a brisk *tête-à-tête*.

"Smith!" said she, in reply to my very earnest inquiry; "Smith!—why, not General John A. B. C.? Bless me, I thought you *knew* all about *him*! This is a wonderfully inventive age! Horrid affair that!—a bloody set of wretches, those Kickapoos!—fought like a hero—prodigies of valor—immortal renown. Smith!—Brevet Brigadier General John A. B. C.!—why, you know he's the man—"

"Man," here broke in Doctor Drummumpp, at the top of his voice, and with a thump that came near knocking the pulpit about our ears; "man that is born of a woman hath but a short time to live; he cometh up and is cut down like a flower!" I started to the extremity of the pew, and perceived by

the animated looks of the divine, that the wrath which had nearly proved fatal to the pulpit had been excited by the whispers of the lady and myself. There was no help for it; so I submitted with a good grace, and listened, in all the martyrdom of dignified silence, to the balance of that very capital discourse.

Next evening found me a somewhat late visitor at the Rantipole theatre, where I felt sure of satisfying my curiosity at once, by merely stepping into the box of those exquisite specimens of affability and omniscience, the Misses Arabella and Miranda Cognoscenti. That fine tragedian, Climax, was doing Iago to a very crowded house, and I experienced some little difficulty in making my wishes understood; especially, as our box was next the slips and completely overlooked the stage.

"Smith?" said Miss Arabella, as she at length comprehended the purport of my query; "Smith?—why, not General John A. B. C.?"

"Smith?" inquired Miranda, musingly. "God bless me, did you ever behold a finer figure?"

"Never, madam, but *do* tell me—"

"Or so inimitable grace?"

"Never, upon my word!—but pray inform me—"

"Or so just an appreciation of stage effect?"

"Madam!"

"Or a more delicate sense of the true beauties of Shakespeare? Be so good as to look at that leg!"

"The devil!" and I turned again to her sister.

"Smith?" said she, "why, not General John A. B. C.? Horrid affair that, wasn't it?—great wretches, those Bugaboos—savage and so on—but we live in a wonderfully inventive age!—Smith!—O yes! great man!—perfect desperado—immortal renown—prodigies of valor! *Never heard!*" [This was given in a scream.] "Bless my soul!—why, he's the man——"

"———mandragora

Nor all the drowsy syrups of the world

Shall ever medicine thee to that sweet sleep

Which thou ow'dst yesterday!"

Here roared out Climax just in my ear, and shaking his fist in my face all the time, in a way that I *couldn't* stand, and I *wouldn't*. I left the Misses Cognoscenti immediately, went behind the scenes forthwith, and gave the

beggarly scoundrel such a thrashing as I trust he will remember to the day of his death.

At the *soirée* of the lovely widow, Mrs. Kathleen O'Trump, I was confident that I should meet with no similar disappointment. Accordingly, I was no sooner seated at the card table, with my pretty hostess for a *vis-à-vis*, than I propounded those questions the solution of which had become a matter so essential to my peace.

"Smith?" said my partner, "why, not General John A. B. C.? Horrid affair that, wasn't it?—diamonds, did you say?—terrible wretches those Kickapoos!—we are playing *whist*, if you please, Mr. Tattle—however, this is the age of invention, most certainly *the* age, one may say—*the* age *par excellence*—speak French? oh, quite a hero—perfect desperado!—*no hearts*, Mr. Tattle? I don't believe it!—immortal renown and all that—prodigies of valor! *Never heard!!*—why, bless me, he's the man——"

"Mann?—*Captain* Mann?" here screamed some little feminine interloper from the farthest corner of the room. "Are you talking about Captain Mann and the duel?—oh, I *must* hear—do tell—go on, Mrs. O'Trump!—do now go on!" And go on Mrs. O'Trump did—all about a certain Captain Mann, who was either shot or hung, or should have been both shot and hung. Yes! Mrs. O'Trump, she went on, and I—I went off. There was no chance of hearing anything farther that evening in regard to Brevet Brigadier General John A. B. C. Smith.

Still I consoled myself with the reflection that the tide of ill luck would not run against me forever, and so determined to make a bold push for information at the rout of that bewitching little angel, the graceful Mrs. Pirouette.

"Smith?" said Mrs. P., as we twirled about together in a *pas de zéphyr*, "Smith?—why not General John A. B. C.? Dreadful business that of the Bugaboos, wasn't it?—terrible creatures, those Indians!—*do* turn out your toes! I really am ashamed of you—man of great courage, poor fellow!—but this is a wonderful age for invention—O dear me, I'm out of breath—quite a desperado—prodigies of valor—*never heard!!*—can't believe it—I shall have to sit down and enlighten you—Smith! why, he's the man——"

"Man-Fred, I tell you!" here bawled out Miss Bas-Bleu, as I led Mrs. Pirouette to a seat. "Did ever anybody hear the like? It's Man-Fred, I say, and not at all by any means Man-Friday." Here Miss Bas-Bleu beckoned to me in a very peremptory manner; and I was obliged, will I nill I, to leave Mrs. P.

for the purpose of deciding a dispute touching the title of a certain poetical drama of Lord Byron's. Although I pronounced, with great promptness, that the true title was *Man-Friday*, and not by any means *Man-Fred*, yet when I returned to seek Mrs. Pirouette she was not to be discovered, and I made my retreat from the house in a very bitter spirit of animosity against the whole race of the Bas-Bleus.

Matters had now assumed a really serious aspect, and I resolved to call at once upon my particular friend, Mr. Theodore Sinivate; for I knew that here at least I should get something like definite information.

"Smith?" said he, in his well-known peculiar way of drawling out his syllables; "Smith?—why, not General John A. B. C.? Savage affair that with the Kickapo-o-o-os, wasn't it? Say! don't you think so?—perfect despera-a-ado—great pity, 'pon my honor!—wonderfully inventive age!—pro-o-odigies of valor! By the by, did you ever hear about Captain Ma-a-a-a-n?"

"Captain 'Mann be d——d!" said I, "please to go on with your story."

"Hem!—oh well!—quite *la même cho-o-ose*, as we say in France. Smith, eh? Brigadier General John A—B—C.? I say"—[here Mr. S. thought proper to put his finger to the side of his nose]—"I say, you don't mean to insinuate now, really and truly, and conscientiously, that you don't know all about that affair of Smith's, as well as I do, eh? Smith? John A—B—C.? Why, bless me, he's the ma-a-an——"

"Mr. Sinivate," said I, imploringly, "is he the man in the mask?"

"No-o-o!" said he, looking wise, "nor the man in the mo-o-on."

This reply I considered a pointed and positive insult, and so left the house at once in high dudgeon, with a firm resolve to call my friend, Mr. Sinivate, to a speedy account for his ungentlemanly conduct and ill-breeding.

In the meantime, however, I had no notion of being thwarted touching the information I desired. There was one resource left me yet. I would go to the fountainhead. I would call forthwith upon the General himself, and demand, in explicit terms, a solution of this abominable piece of mystery. Here, at least, there should be no chance for equivocation. I would be plain, positive, peremptory—as short as pie crust—as concise as Tacitus or Montesquieu.

It was early when I called, and the General was dressing; but I pleaded urgent business, and was shown at once into his bedroom by an old negro valet, who remained in attendance during my visit. As I entered the chamber, I looked about, of course, for the occupant, but did not immediately perceive

him. There was a large and exceedingly odd-looking bundle of something which lay close by my feet on the floor, and, as I was not in the best humor in the world, I gave it a kick out of the way.

"Hem! ahem! rather civil that, I should say!" said the bundle, in one of the smallest, and altogether the funniest little voices, between a squeak and a whistle, that I ever heard in all the days of my existence.

"Ahem! rather civil that, I should observe."

I fairly shouted with terror, and made off, at a tangent, into the farthest extremity of the room.

"God bless me! my dear fellow," here again whistled the bundle, "what—what—what—why, what *is* the matter? I really believe you don't know me at all."

What *could* I say to all this—what *could* I? I staggered into an armchair, and, with staring eyes and open mouth, awaited the solution of the wonder.

"Strange you shouldn't know me though, isn't it?" presently re-squeaked the nondescript, which I now perceived was performing, upon the floor, some inexplicable evolution, very analogous to the drawing on of a stocking. There was only a single leg, however, apparent.

"Strange you shouldn't know me, though, isn't it? Pompey, bring me that leg!" Here Pompey handed the bundle, a very capital cork leg, already dressed, which it screwed on in a trice; and then it stood up before my eyes.

"And a bloody action it *was*," continued the thing, as if in a soliloquy; "but then one musn't fight with the Bugaboos and Kickapoos, and think of coming off with a mere scratch. Pompey, I'll thank you now for that arm. Thomas" [turning to me] "is decidedly the best hand at a cork leg; but if you should ever want an arm, my dear fellow, you must really let me recommend you to Bishop." Here Pompey screwed on an arm.

"We had rather hot work of it, that you may say. Now, you dog, slip on my shoulders and bosom! Pettitt makes the best shoulders, but for a bosom you will have to go to Ducrow."

"Bosom!" said I.

"Pompey, will you *never* be ready with that wig? Scalping is a rough process after all; but then you can procure such a capital scratch at De L'Orme's."

"Scratch!"

"Now, you n——r, my teeth! For a *good* set of these you had better go

to Parmly's at once; high prices, but excellent work. I swallowed some very capital articles, though, when the big Bugaboo rammed me down with the butt end of his rifle."

"Butt end! ram down!! my eye!!"

"O yes, by-the-by, my eye—here, Pompey, you scamp, screw it in! Those Kickapoos are not so very slow at a gouge; but he's a belied man, that Dr. Williams, after all; you can't imagine how well I see with the eyes of his make."

I now began very clearly to perceive that the object before me was nothing more nor less than my new acquaintance, Brevet Brigadier General John A. B. C. Smith. The manipulations of Pompey had made, I must confess, a very striking difference in the appearance of the personal man. The voice, however, still puzzled me no little; but even this apparent mystery was speedily cleared up.

"Pompey, you black rascal," squeaked the General, "I really do believe you would let me go out without my palate."

Hereupon the negro, grumbling out an apology, went up to his master, opened his mouth with the knowing air of a horse-jockey, and adjusted therein a somewhat singular-looking machine, in a very dexterous manner, that I could not altogether comprehend. The alteration, however, in the entire expression of the General's countenance was instantaneous and surprising. When he again spoke, his voice had resumed all that rich melody and strength which I had noticed upon our original introduction.

"D——n the vagabonds!" said he, in so clear a tone that I positively started at the change, "D——n the vagabonds! they not only knocked in the roof of my mouth, but took the trouble to cut off at least seven-eighths of my tongue. There isn't Bonfanti's equal, however, in America, for really good articles of this description. I can recommend you to him with confidence," [here the General bowed,] and assure you that I have the greatest pleasure in so doing."

I acknowledged his kindness in my best manner, and took leave of him at once, with a perfect understanding of the true state of affairs—with a full comprehension of the mystery which had troubled me so long. It was evident. It was a clear case. Brevet Brigadier General John A. B. C. Smith was the man—was *the man that was used up*.



# Art and Automata

"The Artist of the Beautiful"

"The Bell-Tower"

"The Automaton of Dobello"

If we can step back from the dread that automata can cause, they can also be seen as incredible works of man. In literature, man is never more god-like than when creating. This trio of stories offers some of man's finest creations with all the hubris, obsession, and allegory that those acts can embody.

While most of the automata in this anthology are human in form, the beautiful creation in "The Artist of the Beautiful" by Nathaniel Hawthorne (1804–1864) is an intricate and delicate butterfly. The story was originally published in 1884 before being later included in *Mosses from an Old Manse*. The work of Owen, the Artist of the story, goes unappreciated by his peers.

Not so for Bannadonna, the prideful architect in "The Bell-Tower." Herman Melville (1819–1891) isn't generally known for works of speculative fiction. Indeed, this story is more similar in tone to something by Hawthorne, who was a friend and mentor to Melville. "The Bell-Tower" was originally published in *Putnam's Monthly* and later included in *The Piazza Tales* (1856), the title of which is likely a nod to Hawthorne's *Manse*. Not entirely gone from this tale is Melville's almost mythic treatment of human behavior. Bannadonna's masterpiece, created without concern for others, becomes his downfall.

Unlike the other two quite famous authors in this section, H. D. Jenkins is only known for this work. The name is most likely a pseudonym. "The Automaton of Dobello" (published in *The Lakeside Monthly*, 1872) has a slow travelogue-like beginning which sets the stage for a marvel from antiquity—an intricate automaton set on a 100 year cycle to warn of the folly of war.

This section covers three decades of literature and, it should be noted, that this era includes one of the more popular automaton stories, which is not included here due to length. While these three authors were using automata to

display the dangers of ego, Edward Sylvester Ellis was celebrating man's ingenuity with his popular Steam Man of the Prairies dime novels. Its steel, wagon-pulling giant is mostly used as a tool in the adventures of its human creator.



# "The Artist of the Beautiful"

Nathaniel Hawthorne

(1844)

An elderly man, with his pretty daughter on his arm, was passing along the street, and emerged from the gloom of the cloudy evening into the light that fell across the pavement from the window of a small shop. It was a projecting window; and on the inside were suspended a variety of watches, pinchbeck, silver, and one or two of gold, all with their faces turned from the streets, as if churlishly disinclined to inform the wayfarers what o'clock it was. Seated within the shop, sidelong to the window with his pale face bent earnestly over some delicate piece of mechanism on which was thrown the concentrated lustre of a shade lamp, appeared a young man.

"What can Owen Warland be about?" muttered old Peter Hovenden, himself a retired watchmaker, and the former master of this same young man whose occupation he was now wondering at. "What can the fellow be about? These six months past I have never come by his shop without seeing him just as steadily at work as now. It would be a flight beyond his usual foolery to seek for the perpetual motion; and yet I know enough of my old business to be certain that what he is now so busy with is no part of the machinery of a watch."

"Perhaps, father," said Annie, without showing much interest in the question, "Owen is inventing a new kind of timekeeper. I am sure he has ingenuity enough."

"Poh, child! He has not the sort of ingenuity to invent anything better than a Dutch toy," answered her father, who had formerly been put to much vexation by Owen Warland's irregular genius. "A plague on such ingenuity! All the effect that ever I knew of it was to spoil the accuracy of some of the best watches in my shop. He would turn the sun out of its orbit and derange the whole course of time, if, as I said before, his ingenuity could grasp anything bigger than a child's toy!"

"Hush, father! He hears you!" whispered Annie, pressing the old man's arm. "His ears are as delicate as his feelings; and you know how easily disturbed they are. Do let us move on."

So Peter Hovenden and his daughter Annie plodded on without further conversation, until in a by-street of the town they found themselves passing the open door of a blacksmith's shop. Within was seen the forge, now blazing up and illuminating the high and dusky roof, and now confining its lustre to a narrow precinct of the coal-strewn floor, according as the breath of the bellows was puffed forth or again inhaled into its vast leathern lungs. In the intervals of brightness it was easy to distinguish objects in remote corners of the shop and the horseshoes that hung upon the wall; in the momentary gloom the fire seemed to be glimmering amidst the vagueness of unenclosed space. Moving about in this red glare and alternate dusk was the figure of the blacksmith, well worthy to be viewed in so picturesque an aspect of light and shade, where the bright blaze struggled with the black night, as if each would have snatched his comely strength from the other. Anon he drew a white-hot bar of iron from the coals, laid it on the anvil, uplifted his arm of might, and was soon enveloped in the myriads of sparks which the strokes of his hammer scattered into the surrounding gloom.

"Now, that is a pleasant sight," said the old watchmaker. "I know what it is to work in gold; but give me the worker in iron after all is said and done. He spends his labor upon a reality. What say you, daughter Annie?"

"Pray don't speak so loud, father," whispered Annie, "Robert Danforth will hear you."

"And what if he should hear me?" said Peter Hovenden. "I say again, it is a good and a wholesome thing to depend upon main strength and reality, and to earn one's bread with the bare and brawny arm of a blacksmith. A watchmaker gets his brain puzzled by his wheels within a wheel, or loses his health or the nicety of his eyesight, as was my case, and finds himself at middle age, or a little after, past labor at his own trade and fit for nothing else, yet too poor to live at his ease. So I say once again, give me main strength for my money. And then, how it takes the nonsense out of a man! Did you ever hear of a blacksmith being such a fool as Owen Warland yonder?"

"Well said, uncle Hovenden!" shouted Robert Danforth from the forge, in a full, deep, merry voice, that made the roof re-echo. "And what says Miss Annie to that doctrine? She, I suppose, will think it a genteeler business to tinker up a lady's watch than to forge a horseshoe or make a gridiron."

Annie drew her father onward without giving him time for reply.

But we must return to Owen Warland's shop, and spend more

meditation upon his history and character than either Peter Hovenden, or probably his daughter Annie, or Owen's old schoolfellow, Robert Danforth, would have thought due to so slight a subject. From the time that his little fingers could grasp a penknife, Owen had been remarkable for a delicate ingenuity, which sometimes produced pretty shapes in wood, principally figures of flowers and birds, and sometimes seemed to aim at the hidden mysteries of mechanism. But it was always for purposes of grace, and never with any mockery of the useful. He did not, like the crowd of schoolboy artisans, construct little windmills on the angle of a barn or watermills across the neighboring brook. Those who discovered such peculiarity in the boy as to think it worth their while to observe him closely, sometimes saw reason to suppose that he was attempting to imitate the beautiful movements of Nature as exemplified in the flight of birds or the activity of little animals. It seemed, in fact, a new development of the love of the beautiful, such as might have made him a poet, a painter, or a sculptor, and which was as completely refined from all utilitarian coarseness as it could have been in either of the fine arts. He looked with singular distaste at the stiff and regular processes of ordinary machinery. Being once carried to see a steam engine, in the expectation that his intuitive comprehension of mechanical principles would be gratified, he turned pale and grew sick, as if something monstrous and unnatural had been presented to him. This horror was partly owing to the size and terrible energy of the iron laborer; for the character of Owen's mind was microscopic, and tended naturally to the minute, in accordance with his diminutive frame and the marvellous smallness and delicate power of his fingers. Not that his sense of beauty was thereby diminished into a sense of prettiness. The beautiful idea has no relation to size, and may be as perfectly developed in a space too minute for any but microscopic investigation as within the ample verge that is measured by the arc of the rainbow. But, at all events, this characteristic minuteness in his objects and accomplishments made the world even more incapable than it might otherwise have been of appreciating Owen Warland's genius. The boy's relatives saw nothing better to be done—as perhaps there was not—than to bind him apprentice to a watchmaker, hoping that his strange ingenuity might thus be regulated and put to utilitarian purposes.

Peter Hovenden's opinion of his apprentice has already been expressed. He could make nothing of the lad. Owen's apprehension of the professional mysteries, it is true, was inconceivably quick; but he altogether forgot or

despised the grand object of a watchmaker's business, and cared no more for the measurement of time than if it had been merged into eternity. So long, however, as he remained under his old master's care, Owen's lack of sturdiness made it possible, by strict injunctions and sharp oversight, to restrain his creative eccentricity within bounds; but when his apprenticeship was served out, and he had taken the little shop which Peter Hovenden's failing eyesight compelled him to relinquish, then did people recognize how unfit a person was Owen Warland to lead old blind Father Time along his daily course. One of his most rational projects was to connect a musical operation with the machinery of his watches, so that all the harsh dissonances of life might be rendered tuneful, and each flitting moment fall into the abyss of the past in golden drops of harmony. If a family clock was intrusted to him for repair,—one of those tall, ancient clocks that have grown nearly allied to human nature by measuring out the lifetime of many generations,—he would take upon himself to arrange a dance or funeral procession of figures across its venerable face, representing twelve mirthful or melancholy hours. Several freaks of this kind quite destroyed the young watchmaker's credit with that steady and matter-of-fact class of people who hold the opinion that time is not to be trifled with, whether considered as the medium of advancement and prosperity in this world or preparation for the next. His custom rapidly diminished—a misfortune, however, that was probably reckoned among his better accidents by Owen Warland, who was becoming more and more absorbed in a secret occupation which drew all his science and manual dexterity into itself, and likewise gave full employment to the characteristic tendencies of his genius. This pursuit had already consumed many months.

After the old watchmaker and his pretty daughter had gazed at him out of the obscurity of the street, Owen Warland was seized with a fluttering of the nerves, which made his hand tremble too violently to proceed with such delicate labor as he was now engaged upon.

"It was Annie herself!" murmured he. "I should have known it, by this throbbing of my heart, before I heard her father's voice. Ah, how it throbs! I shall scarcely be able to work again on this exquisite mechanism tonight. Annie! dearest Annie! thou shouldst give firmness to my heart and hand, and not shake them thus; for if I strive to put the very spirit of beauty into form and give it motion, it is for thy sake alone. O throbbing heart, be quiet! If my labor be thus thwarted, there will come vague and unsatisfied dreams which will leave me spiritless tomorrow."

As he was endeavoring to settle himself again to his task, the shop door opened and gave admittance to no other than the stalwart figure which Peter Hovenden had paused to admire, as seen amid the light and shadow of the blacksmith's shop. Robert Danforth had brought a little anvil of his own manufacture, and peculiarly constructed, which the young artist had recently bespoken. Owen examined the article and pronounced it fashioned according to his wish.

"Why, yes," said Robert Danforth, his strong voice filling the shop as with the sound of a bass viol, "I consider myself equal to anything in the way of my own trade; though I should have made but a poor figure at yours with such a fist as this," added he, laughing, as he laid his vast hand beside the delicate one of Owen. "But what then? I put more main strength into one blow of my sledge hammer than all that you have expended since you were a 'prentice. Is not that the truth?"

"Very probably," answered the low and slender voice of Owen. "Strength is an earthly monster. I make no pretensions to it. My force, whatever there may be of it, is altogether spiritual."

"Well, but, Owen, what are you about?" asked his old schoolfellow, still in such a hearty volume of tone that it made the artist shrink, especially as the question related to a subject so sacred as the absorbing dream of his imagination. "Folks do say that you are trying to discover the perpetual motion."

"The perpetual motion? Nonsense!" replied Owen Warland, with a movement of disgust; for he was full of little petulances. "It can never be discovered. It is a dream that may delude men whose brains are mystified with matter, but not me. Besides, if such a discovery were possible, it would not be worth my while to make it only to have the secret turned to such purposes as are now effected by steam and water power. I am not ambitious to be honored with the paternity of a new kind of cotton machine."

"That would be droll enough!" cried the blacksmith, breaking out into such an uproar of laughter that Owen himself and the bell glasses on his work board quivered in unison. "No, no, Owen! No child of yours will have iron joints and sinews. Well, I won't hinder you any more. Good night, Owen, and success, and if you need any assistance, so far as a downright blow of hammer upon anvil will answer the purpose, I'm your man."

And with another laugh the man of main strength left the shop.

"How strange it is," whispered Owen Warland to himself, leaning his

head upon his hand, "that all my musings, my purposes, my passion for the beautiful, my consciousness of power to create it,—a finer, more ethereal power, of which this earthly giant can have no conception,—all, all, look so vain and idle whenever my path is crossed by Robert Danforth! He would drive me mad were I to meet him often. His hard, brute force darkens and confuses the spiritual element within me; but I, too, will be strong in my own way. I will not yield to him."

He took from beneath a glass a piece of minute machinery, which he set in the condensed light of his lamp, and, looking intently at it through a magnifying glass, proceeded to operate with a delicate instrument of steel. In an instant, however, he fell back in his chair and clasped his hands, with a look of horror on his face that made its small features as impressive as those of a giant would have been.

"Heaven! What have I done?" exclaimed he. "The vapor, the influence of that brute force,—it has bewildered me and obscured my perception. I have made the very stroke—the fatal stroke—that I have dreaded from the first. It is all over—the toil of months, the object of my life. I am ruined!"

And there he sat, in strange despair, until his lamp flickered in the socket and left the Artist of the Beautiful in darkness.

Thus it is that ideas, which grow up within the imagination and appear so lovely to it and of a value beyond whatever men call valuable, are exposed to be shattered and annihilated by contact with the practical. It is requisite for the ideal artist to possess a force of character that seems hardly compatible with its delicacy; he must keep his faith in himself while the incredulous world assails him with its utter disbelief; he must stand up against mankind and be his own sole disciple, both as respects his genius and the objects to which it is directed.

For a time Owen Warland succumbed to this severe but inevitable test. He spent a few sluggish weeks with his head so continually resting in his hands that the townspeople had scarcely an opportunity to see his countenance. When at last it was again uplifted to the light of day, a cold, dull, nameless change was perceptible upon it. In the opinion of Peter Hovenden, however, and that order of sagacious understandings who think that life should be regulated, like clockwork, with leaden weights, the alteration was entirely for the better. Owen now, indeed, applied himself to business with dogged industry. It was marvellous to witness the obtuse gravity with which he would inspect the wheels of a great old silver watch



thereby delighting the owner, in whose fob it had been worn till he deemed it a portion of his own life, and was accordingly jealous of its treatment. In consequence of the good report thus acquired, Owen Warland was invited by the proper authorities to regulate the clock in the church steeple. He succeeded so admirably in this matter of public interest that the merchants gruffly acknowledged his merits on 'Change; the nurse whispered his praises as she gave the potion in the sick-chamber; the lover blessed him at the hour of appointed interview; and the town in general thanked Owen for the punctuality of dinner time. In a word, the heavy weight upon his spirits kept everything in order, not merely within his own system, but wheresoever the iron accents of the church clock were audible. It was a circumstance, though minute, yet characteristic of his present state, that, when employed to engrave names or initials on silver spoons, he now wrote the requisite letters in the plainest possible style, omitting a variety of fanciful flourishes that had heretofore distinguished his work in this kind.

One day, during the era of this happy transformation, old Peter Hovenden came to visit his former apprentice.

"Well, Owen," said he, "I am glad to hear such good accounts of you from all quarters, and especially from the town clock yonder, which speaks in your commendation every hour of the twenty-four. Only get rid altogether of your nonsensical trash about the beautiful, which I nor nobody else, nor yourself to boot, could ever understand,—only free yourself of that, and your success in life is as sure as daylight. Why, if you go on in this way, I should even venture to let you doctor this precious old watch of mine; though, except my daughter Annie, I have nothing else so valuable in the world."

"I should hardly dare touch it, sir," replied Owen, in a depressed tone; for he was weighed down by his old master's presence.

"In time," said the latter,—*"In time, you will be capable of it."*

The old watchmaker, with the freedom naturally consequent on his former authority, went on inspecting the work which Owen had in hand at the moment, together with other matters that were in progress. The artist, meanwhile, could scarcely lift his head. There was nothing so antipodal to his nature as this man's cold, unimaginative sagacity, by contact with which everything was converted into a dream except the densest matter of the physical world. Owen groaned in spirit and prayed fervently to be delivered from him.

"But what is this?" cried Peter Hovenden abruptly, taking up a dusty

bell glass, beneath which appeared a mechanical something, as delicate and minute as the system of a butterfly's anatomy. "What have we here? Owen! Owen! there is witchcraft in these little chains, and wheels, and paddles. See! with one pinch of my finger and thumb I am going to deliver you from all future peril."

"For Heaven's sake," screamed Owen Warland, springing up with wonderful energy, "as you would not drive me mad, do not touch it! The slightest pressure of your finger would ruin me forever."

"Aha, young man! And is it so?" said the old watchmaker, looking at him with just enough penetration to torture Owen's soul with the bitterness of worldly criticism. "Well, take your own course; but I warn you again that in this small piece of mechanism lives your evil spirit. Shall I exorcise him?"

"You are my evil spirit," answered Owen, much excited,—"you and the hard, coarse world! The leaden thoughts and the despondency that you fling upon me are my clogs, else I should long ago have achieved the task that I was created for."

Peter Hovenden shook his head, with the mixture of contempt and indignation which mankind, of whom he was partly a representative, deem themselves entitled to feel towards all simpletons who seek other prizes than the dusty one along the highway. He then took his leave, with an uplifted finger and a sneer upon his face that haunted the artist's dreams for many a night afterwards. At the time of his old master's visit, Owen was probably on the point of taking up the relinquished task; but, by this sinister event, he was thrown back into the state whence he had been slowly emerging.

But the innate tendency of his soul had only been accumulating fresh vigor during its apparent sluggishness. As the summer advanced he almost totally relinquished his business, and permitted Father Time, so far as the old gentleman was represented by the clocks and watches under his control, to stray at random through human life, making infinite confusion among the train of bewildered hours. He wasted the sunshine, as people said, in wandering through the woods and fields and along the banks of streams. There, like a child, he found amusement in chasing butterflies or watching the motions of water insects. There was something truly mysterious in the intentness with which he contemplated these living playthings as they sported on the breeze or examined the structure of an imperial insect whom he had imprisoned. The chase of butterflies was an apt emblem of the ideal pursuit in which he had spent so many golden hours; but would the beautiful idea ever

be yielded to his hand like the butterfly that symbolized it? Sweet, doubtless, were these days, and congenial to the artist's soul. They were full of bright conceptions, which gleamed through his intellectual world as the butterflies gleamed through the outward atmosphere, and were real to him, for the instant, without the toil, and perplexity, and many disappointments of attempting to make them visible to the sensual eye. Alas that the artist, whether in poetry, or whatever other material, may not content himself with the inward enjoyment of the beautiful, but must chase the flitting mystery beyond the verge of his ethereal domain, and crush its frail being in seizing it with a material grasp. Owen Warland felt the impulse to give external reality to his ideas as irresistibly as any of the poets or painters who have arrayed the world in a dimmer and fainter beauty, imperfectly copied from the richness of their visions.

The night was now his time for the slow progress of re-creating the one idea to which all his intellectual activity referred itself. Always at the approach of dusk he stole into the town, locked himself within his shop, and wrought with patient delicacy of touch for many hours. Sometimes he was startled by the rap of the watchman, who, when all the world should be asleep, had caught the gleam of lamplight through the crevices of Owen Warland's shutters. Daylight, to the morbid sensibility of his mind, seemed to have an intrusiveness that interfered with his pursuits. On cloudy and inclement days, therefore, he sat with his head upon his hands, muffling, as it were, his sensitive brain in a mist of indefinite musings, for it was a relief to escape from the sharp distinctness with which he was compelled to shape out his thoughts during his nightly toil.

From one of these fits of torpor he was aroused by the entrance of Annie Hovenden, who came into the shop with the freedom of a customer, and also with something of the familiarity of a childish friend. She had worn a hole through her silver thimble, and wanted Owen to repair it.

"But I don't know whether you will condescend to such a task," said she, laughing, "now that you are so taken up with the notion of putting spirit into machinery."

"Where did you get that idea, Annie?" said Owen, starting in surprise.

"Oh, out of my own head," answered she, "and from something that I heard you say, long ago, when you were but a boy and I a little child. But come, will you mend this poor thimble of mine?"

"Anything for your sake, Annie," said Owen Warland,—"anything,

even were it to work at Robert Danforth's forge."

"And that would be a pretty sight!" retorted Annie, glancing with imperceptible slightness at the artist's small and slender frame. "Well; here is the thimble."

"But that is a strange idea of yours," said Owen, "about the spiritualization of matter."

And then the thought stole into his mind that this young girl possessed the gift to comprehend him better than all the world besides. And what a help and strength would it be to him in his lonely toil if he could gain the sympathy of the only being whom he loved! To persons whose pursuits are insulated from the common business of life—who are either in advance of mankind or apart from it—there often comes a sensation of moral cold that makes the spirit shiver as if it had reached the frozen solitudes around the pole. What the prophet, the poet, the reformer, the criminal, or any other man with human yearnings, but separated from the multitude by a peculiar lot, might feel, poor Owen felt.

"Annie," cried he, growing pale as death at the thought, "how gladly would I tell you the secret of my pursuit! You, methinks, would estimate it rightly. You, I know, would hear it with a reverence that I must not expect from the harsh, material world."

"Would I not? to be sure I would!" replied Annie Hovenden, lightly laughing. "Come; explain to me quickly what is the meaning of this little whirligig, so delicately wrought that it might be a plaything for Queen Mab. See! I will put it in motion."

"Hold!" exclaimed Owen, "hold!"

Annie had but given the slightest possible touch, with the point of a needle, to the same minute portion of complicated machinery which has been more than once mentioned, when the artist seized her by the wrist with a force that made her scream aloud. She was affrighted at the convulsion of intense rage and anguish that writhed across his features. The next instant he let his head sink upon his hands.

"Go, Annie," murmured he; "I have deceived myself, and must suffer for it. I yearned for sympathy, and thought, and fancied, and dreamed that you might give it me; but you lack the talisman, Annie, that should admit you into my secrets. That touch has undone the toil of months and the thought of a lifetime! It was not your fault, Annie; but you have ruined me!"

Poor Owen Warland! He had indeed erred, yet pardonably; for if any

human spirit could have sufficiently revered the processes so sacred in his eyes, it must have been a woman's. Even Annie Hovenden, possibly might not have disappointed him had she been enlightened by the deep intelligence of love.

The artist spent the ensuing winter in a way that satisfied any persons who had hitherto retained a hopeful opinion of him that he was, in truth, irrevocably doomed to un-utility as regarded the world, and to an evil destiny on his own part. The decease of a relative had put him in possession of a small inheritance. Thus freed from the necessity of toil, and having lost the steadfast influence of a great purpose,—great, at least, to him,—he abandoned himself to habits from which it might have been supposed the mere delicacy of his organization would have availed to secure him. But when the ethereal portion of a man of genius is obscured the earthly part assumes an influence the more uncontrollable, because the character is now thrown off the balance to which Providence had so nicely adjusted it, and which, in coarser natures, is adjusted by some other method. Owen Warland made proof of whatever show of bliss may be found in riot. He looked at the world through the golden medium of wine, and contemplated the visions that bubble up so gayly around the brim of the glass, and that people the air with shapes of pleasant madness, which so soon grow ghostly and forlorn. Even when this dismal and inevitable change had taken place, the young man might still have continued to quaff the cup of enchantments, though its vapor did but shroud life in gloom and fill the gloom with spectres that mocked at him. There was a certain irksomeness of spirit, which, being real, and the deepest sensation of which the artist was now conscious, was more intolerable than any fantastic miseries and horrors that the abuse of wine could summon up. In the latter case he could remember, even out of the midst of his trouble, that all was but a delusion; in the former, the heavy anguish was his actual life.

From this perilous state he was redeemed by an incident which more than one person witnessed, but of which the shrewdest could not explain or conjecture the operation on Owen Warland's mind. It was very simple. On a warm afternoon of spring, as the artist sat among his riotous companions with a glass of wine before him, a splendid butterfly flew in at the open window and fluttered about his head.

"Ah," exclaimed Owen, who had drank freely, "are you alive again, child of the sun and playmate of the summer breeze, after your dismal

winter's nap? Then it is time for me to be at work!"

And, leaving his unemptied glass upon the table, he departed and was never known to sip another drop of wine.

And now, again, he resumed his wanderings in the woods and fields. It might be fancied that the bright butterfly, which had come so spirit-like into the window as Owen sat with the rude revellers, was indeed a spirit commissioned to recall him to the pure, ideal life that had so etherealized him among men. It might be fancied that he went forth to seek this spirit in its sunny haunts; for still, as in the summer time gone by, he was seen to steal gently up wherever a butterfly had alighted, and lose himself in contemplation of it. When it took flight his eyes followed the winged vision, as if its airy track would show the path to heaven. But what could be the purpose of the unseasonable toil, which was again resumed, as the watchman knew by the lines of lamplight through the crevices of Owen Warland's shutters? The townspeople had one comprehensive explanation of all these singularities. Owen Warland had gone mad! How universally efficacious—how satisfactory, too, and soothing to the injured sensibility of narrowness and dullness—is this easy method of accounting for whatever lies beyond the world's most ordinary scope! From St. Paul's days down to our poor little Artist of the Beautiful, the same talisman had been applied to the elucidation of all mysteries in the words or deeds of men who spoke or acted too wisely or too well. In Owen Warland's case the judgment of his townspeople may have been correct. Perhaps he was mad. The lack of sympathy—that contrast between himself and his neighbors which took away the restraint of example—was enough to make him so. Or possibly he had caught just so much of ethereal radiance as served to bewilder him, in an earthly sense, by its intermixture with the common daylight.

One evening, when the artist had returned from a customary ramble and had just thrown the lustre of his lamp on the delicate piece of work so often interrupted, but still taken up again, as if his fate were embodied in its mechanism, he was surprised by the entrance of old Peter Hovenden. Owen never met this man without a shrinking of the heart. Of all the world he was most terrible, by reason of a keen understanding which saw so distinctly what it did see, and disbelieved so uncompromisingly in what it could not see. On this occasion the old watchmaker had merely a gracious word or two to say.

"Owen, my lad," said he, "we must see you at my house tomorrow night."

The artist began to mutter some excuse.

"Oh, but it must be so," quoth Peter Hovenden, "for the sake of the days when you were one of the household. What, my boy! don't you know that my daughter Annie is engaged to Robert Danforth? We are making an entertainment, in our humble way, to celebrate the event."

That little monosyllable was all he uttered; its tone seemed cold and unconcerned to an ear like Peter Hovenden's; and yet there was in it the stifled outcry of the poor artist's heart, which he compressed within him like a man holding down an evil spirit. One slight outbreak, however, imperceptible to the old watchmaker, he allowed himself. Raising the instrument with which he was about to begin his work, he let it fall upon the little system of machinery that had, anew, cost him months of thought and toil. It was shattered by the stroke!

Owen Warland's story would have been no tolerable representation of the troubled life of those who strive to create the beautiful, if, amid all other thwarting influences, love had not interposed to steal the cunning from his hand. Outwardly he had been no ardent or enterprising lover; the career of his passion had confined its tumults and vicissitudes so entirely within the artist's imagination that Annie herself had scarcely more than a woman's intuitive perception of it; but, in Owen's view, it covered the whole field of his life. Forgetful of the time when she had shown herself incapable of any deep response, he had persisted in connecting all his dreams of artistical success with Annie's image; she was the visible shape in which the spiritual power that he worshiped, and on whose altar he hoped to lay a not unworthy offering, was made manifest to him. Of course he had deceived himself; there were no such attributes in Annie Hovenden as his imagination had endowed her with. She, in the aspect which she wore to his inward vision, was as much a creature of his own as the mysterious piece of mechanism would be were it ever realized. Had he become convinced of his mistake through the medium of successful love,—had he won Annie to his bosom, and there beheld her fade from angel into ordinary woman,—the disappointment might have driven him back, with concentrated energy, upon his sole remaining object. On the other hand, had he found Annie what he fancied, his lot would have been so rich in beauty that out of its mere redundancy he might have wrought the beautiful into many a worthier type than he had toiled for; but the guise in which his sorrow came to him, the sense that the angel of his life had been snatched away and given to a rude man of earth and iron, who could neither

need nor appreciate her ministrations,—this was the very perversity of fate that makes human existence appear too absurd and contradictory to be the scene of one other hope or one other fear. There was nothing left for Owen Warland but to sit down like a man that had been stunned.

He went through a fit of illness. After his recovery his small and slender frame assumed an obtuser garniture of flesh than it had ever before worn. His thin cheeks became round; his delicate little hand, so spiritually fashioned to achieve fairy task-work, grew plumper than the hand of a thriving infant. His aspect had a childishness such as might have induced a stranger to pat him on the head—pausing, however, in the act, to wonder what manner of child was here. It was as if the spirit had gone out of him, leaving the body to flourish in a sort of vegetable existence. Not that Owen Warland was idiotic. He could talk, and not irrationally. Somewhat of a babbler, indeed, did people begin to think him; for he was apt to discourse at wearisome length of marvels of mechanism that he had read about in books, but which he had learned to consider as absolutely fabulous. Among them he enumerated the Man of Brass, constructed by Albertus Magnus, and the Brazen Head of Friar Bacon; and, coming down to later times, the automata of a little coach and horses, which it was pretended had been manufactured for the Dauphin of France; together with an insect that buzzed about the ear like a living fly, and yet was but a contrivance of minute steel springs. There was a story, too, of a duck that waddled, and quacked, and ate; though, had any honest citizen purchased it for dinner, he would have found himself cheated with the mere mechanical apparition of a duck.

"But all these accounts," said Owen Warland, "I am now satisfied are mere impositions."

Then, in a mysterious way, he would confess that he once thought differently. In his idle and dreamy days he had considered it possible, in a certain sense, to spiritualize machinery, and to combine with the new species of life and motion thus produced a beauty that should attain to the ideal which Nature has proposed to herself in all her creatures, but has never taken pains to realize. He seemed, however, to retain no very distinct perception either of the process of achieving this object or of the design itself.

"I have thrown it all aside now," he would say. "It was a dream such as young men are always mystifying themselves with. Now that I have acquired a little common sense, it makes me laugh to think of it."

Poor, poor and fallen Owen Warland! These were the symptoms that he



had ceased to be an inhabitant of the better sphere that lies unseen around us. He had lost his faith in the invisible, and now prided himself, as such unfortunates invariably do, in the wisdom which rejected much that even his eye could see, and trusted confidently in nothing but what his hand could touch. This is the calamity of men whose spiritual part dies out of them and leaves the grosser understanding to assimilate them more and more to the things of which alone it can take cognizance; but in Owen Warland the spirit was not dead nor passed away; it only slept.

How it awoke again is not recorded. Perhaps the torpid slumber was broken by a convulsive pain. Perhaps, as in a former instance, the butterfly came and hovered about his head and re-inspired him,—as indeed this creature of the sunshine had always a mysterious mission for the artist,—re-inspired him with the former purpose of his life. Whether it were pain or happiness that thrilled through his veins, his first impulse was to thank Heaven for rendering him again the being of thought, imagination, and keenest sensibility that he had long ceased to be.

"Now for my task," said he. "Never did I feel such strength for it as now."

Yet, strong as he felt himself, he was incited to toil the more diligently by an anxiety lest death should surprise him in the midst of his labors. This anxiety, perhaps, is common to all men who set their hearts upon anything so high, in their own view of it, that life becomes of importance only as conditional to its accomplishment. So long as we love life for itself, we seldom dread the losing it. When we desire life for the attainment of an object, we recognize the frailty of its texture. But, side by side with this sense of insecurity, there is a vital faith in our invulnerability to the shaft of death while engaged in any task that seems assigned by Providence as our proper thing to do, and which the world would have cause to mourn for should we leave it unaccomplished. Can the philosopher, big with the inspiration of an idea that is to reform mankind, believe that he is to be beckoned from this sensible existence at the very instant when he is mustering his breath to speak the word of light? Should he perish so, the weary ages may pass away—the world's, whose life sand may fall, drop by drop—before another intellect is prepared to develop the truth that might have been uttered then. But history affords many an example where the most precious spirit, at any particular epoch manifested in human shape, has gone hence untimely, without space allowed him, so far as mortal judgment could discern, to perform his mission

on the earth. The prophet dies, and the man of torpid heart and sluggish brain lives on. The poet leaves his song half sung, or finishes it, beyond the scope of mortal ears, in a celestial choir. The painter—as Allston did—leaves half his conception on the canvas to sadden us with its imperfect beauty, and goes to picture forth the whole, if it be no irreverence to say so, in the hues of heaven. But rather such incomplete designs of this life will be perfected nowhere. This so frequent abortion of man's dearest projects must be taken as a proof that the deeds of earth, however etherealized by piety or genius, are without value, except as exercises and manifestations of the spirit. In heaven, all ordinary thought is higher and more melodious than Milton's song. Then, would he add another verse to any strain that he had left unfinished here?

But to return to Owen Warland. It was his fortune, good or ill, to achieve the purpose of his life. Pass we over a long space of intense thought, yearning effort, minute toil, and wasting anxiety, succeeded by an instant of solitary triumph: let all this be imagined; and then behold the artist, on a winter evening, seeking admittance to Robert Danforth's fireside circle. There he found the man of iron, with his massive substance thoroughly warmed and attempered by domestic influences. And there was Annie, too, now transformed into a matron, with much of her husband's plain and sturdy nature, but imbued, as Owen Warland still believed, with a finer grace, that might enable her to be the interpreter between strength and beauty. It happened, likewise, that old Peter Hovenden was a guest this evening at his daughter's fireside, and it was his well-remembered expression of keen, cold criticism that first encountered the artist's glance.

"My old friend Owen!" cried Robert Danforth, starting up, and compressing the artist's delicate fingers within a hand that was accustomed to gripe bars of iron. "This is kind and neighborly to come to us at last. I was afraid your perpetual motion had bewitched you out of the remembrance of old times."

"We are glad to see you," said Annie, while a blush reddened her matronly cheek. "It was not like a friend to stay from us so long."

"Well, Owen," inquired the old watchmaker, as his first greeting, "how comes on the beautiful? Have you created it at last?"

The artist did not immediately reply, being startled by the apparition of a young child of strength that was tumbling about on the carpet,—a little personage who had come mysteriously out of the infinite, but with something so sturdy and real in his composition that he seemed moulded out of the

densest substance which earth could supply. This hopeful infant crawled towards the newcomer, and setting himself on end, as Robert Danforth expressed the posture, stared at Owen with a look of such sagacious observation that the mother could not help exchanging a proud glance with her husband. But the artist was disturbed by the child's look, as imagining a resemblance between it and Peter Hovenden's habitual expression. He could have fancied that the old watchmaker was compressed into this baby shape, and looking out of those baby eyes, and repeating, as he now did, the malicious question: "The beautiful, Owen! How comes on the beautiful? Have you succeeded in creating the beautiful?"

"I have succeeded," replied the artist, with a momentary light of triumph in his eyes and a smile of sunshine, yet steeped in such depth of thought that it was almost sadness. "Yes, my friends, it is the truth. I have succeeded."

"Indeed!" cried Annie, a look of maiden mirthfulness peeping out of her face again. "And is it lawful, now, to inquire what the secret is?"

"Surely; it is to disclose it that I have come," answered Owen Warland. "You shall know, and see, and touch, and possess the secret! For, Annie,—if by that name I may still address the friend of my boyish years,—Annie, it is for your bridal gift that I have wrought this spiritualized mechanism, this harmony of motion, this mystery of beauty. It comes late, indeed; but it is as we go onward in life, when objects begin to lose their freshness of hue and our souls their delicacy of perception, that the spirit of beauty is most needed. If,—forgive me, Annie,—if you know how—to value this gift, it can never come too late."

He produced, as he spoke, what seemed a jewel box. It was carved richly out of ebony by his own hand, and inlaid with a fanciful tracery of pearl, representing a boy in pursuit of a butterfly, which, elsewhere, had become a winged spirit, and was flying heavenward; while the boy, or youth, had found such efficacy in his strong desire that he ascended from earth to cloud, and from cloud to celestial atmosphere, to win the beautiful. This case of ebony the artist opened, and bade Annie place her fingers on its edge. She did so, but almost screamed as a butterfly fluttered forth, and, alighting on her finger's tip, sat waving the ample magnificence of its purple and gold-speckled wings, as if in prelude to a flight. It is impossible to express by words the glory, the splendor, the delicate gorgeousness which were softened into the beauty of this object. Nature's ideal butterfly was here realized in all

its perfection; not in the pattern of such faded insects as flit among earthly flowers, but of those which hover across the meads of paradise for child-angels and the spirits of departed infants to disport themselves with. The rich down was visible upon its wings; the lustre of its eyes seemed instinct with spirit. The firelight glimmered around this wonder—the candles gleamed upon it; but it glistened apparently by its own radiance, and illuminated the finger and outstretched hand on which it rested with a white gleam like that of precious stones. In its perfect beauty, the consideration of size was entirely lost. Had its wings overreached the firmament, the mind could not have been more filled or satisfied.

"Beautiful! beautiful!" exclaimed Annie. "Is it alive? Is it alive?"

"Alive? To be sure it is," answered her husband. "Do you suppose any mortal has skill enough to make a butterfly, or would put himself to the trouble of making one, when any child may catch a score of them in a summer's afternoon? Alive? Certainly! But this pretty box is undoubtedly of our friend Owen's manufacture; and really it does him credit."

At this moment the butterfly waved its wings anew, with a motion so absolutely lifelike that Annie was startled, and even awestricken; for, in spite of her husband's opinion, she could not satisfy herself whether it was indeed a living creature or a piece of wondrous mechanism.

"Is it alive?" she repeated, more earnestly than before.

"Judge for yourself," said Owen Warland, who stood gazing in her face with fixed attention.

The butterfly now flung itself upon the air, fluttered round Annie's head, and soared into a distant region of the parlor, still making itself perceptible to sight by the starry gleam in which the motion of its wings enveloped it. The infant on the floor followed its course with his sagacious little eyes. After flying about the room, it returned in a spiral curve and settled again on Annie's finger.

"But is it alive?" exclaimed she again; and the finger on which the gorgeous mystery had alighted was so tremulous that the butterfly was forced to balance himself with his wings. "Tell me if it be alive, or whether you created it."

"Wherefore ask who created it, so it be beautiful?" replied Owen Warland. "Alive? Yes, Annie; it may well be said to possess life, for it has absorbed my own being into itself; and in the secret of that butterfly, and in its beauty,—which is not merely outward, but deep as its whole system,—is

represented the intellect, the imagination, the sensibility, the soul of an Artist of the Beautiful! Yes; I created it. But"—and here his countenance somewhat changed—"this butterfly is not now to me what it was when I beheld it afar off in the daydreams of my youth."

"Be it what it may, it is a pretty plaything," said the blacksmith, grinning with childlike delight. "I wonder whether it would condescend to alight on such a great clumsy finger as mine? Hold it hither, Annie."

By the artist's direction, Annie touched her finger's tip to that of her husband; and, after a momentary delay, the butterfly fluttered from one to the other. It preluded a second flight by a similar, yet not precisely the same, waving of wings as in the first experiment; then, ascending from the blacksmith's stalwart finger, it rose in a gradually enlarging curve to the ceiling, made one wide sweep around the room, and returned with an undulating movement to the point whence it had started.

"Well, that does beat all nature!" cried Robert Danforth, bestowing the heartiest praise that he could find expression for; and, indeed, had he paused there, a man of finer words and nicer perception could not easily have said more. "That goes beyond me, I confess. But what then? There is more real use in one downright blow of my sledge hammer than in the whole five years' labor that our friend Owen has wasted on this butterfly."

Here the child clapped his hands and made a great babble of indistinct utterance, apparently demanding that the butterfly should be given him for a plaything.

Owen Warland, meanwhile, glanced sidelong at Annie, to discover whether she sympathized in her husband's estimate of the comparative value of the beautiful and the practical. There was, amid all her kindness towards himself, amid all the wonder and admiration with which she contemplated the marvellous work of his hands and incarnation of his idea, a secret scorn—too secret, perhaps, for her own consciousness, and perceptible only to such intuitive discernment as that of the artist. But Owen, in the latter stages of his pursuit, had risen out of the region in which such a discovery might have been torture. He knew that the world, and Annie as the representative of the world, whatever praise might be bestowed, could never say the fitting word nor feel the fitting sentiment which should be the perfect recompense of an artist who, symbolizing a lofty moral by a material trifle,—converting what was earthly to spiritual gold,—had won the beautiful into his handiwork. Not at this latest moment was he to learn that the reward of all high performance

must be sought within itself, or sought in vain. There was, however, a view of the matter which Annie and her husband, and even Peter Hovenden, might fully have understood, and which would have satisfied them that the toil of years had here been worthily bestowed. Owen Warland might have told them that this butterfly, this plaything, this bridal gift of a poor watchmaker to a blacksmith's wife, was, in truth, a gem of art that a monarch would have purchased with honors and abundant wealth, and have treasured it among the jewels of his kingdom as the most unique and wondrous of them all. But the artist smiled and kept the secret to himself.

"Father," said Annie, thinking that a word of praise from the old watchmaker might gratify his former apprentice, "do come and admire this pretty butterfly."

"Let us see," said Peter Hovenden, rising from his chair, with a sneer upon his face that always made people doubt, as he himself did, in everything but a material existence. "Here is my finger for it to alight upon. I shall understand it better when once I have touched it."

But, to the increased astonishment of Annie, when the tip of her father's finger was pressed against that of her husband, on which the butterfly still rested, the insect drooped its wings and seemed on the point of falling to the floor. Even the bright spots of gold upon its wings and body, unless her eyes deceived her, grew dim, and the glowing purple took a dusky hue, and the starry lustre that gleamed around the blacksmith's hand became faint and vanished.

"It is dying! it is dying!" cried Annie, in alarm.

"It has been delicately wrought," said the artist, calmly. "As I told you, it has imbibed a spiritual essence—call it magnetism, or what you will. In an atmosphere of doubt and mockery its exquisite susceptibility suffers torture, as does the soul of him who instilled his own life into it. It has already lost its beauty; in a few moments more its mechanism would be irreparably injured."

"Take away your hand, father!" entreated Annie, turning pale. "Here is my child; let it rest on his innocent hand. There, perhaps, its life will revive and its colors grow brighter than ever."

Her father, with an acrid smile, withdrew his finger. The butterfly then appeared to recover the power of voluntary motion, while its hues assumed much of their original lustre, and the gleam of starlight, which was its most ethereal attribute, again formed a halo round about it. At first, when transferred from Robert Danforth's hand to the small finger of the child, this

radiance grew so powerful that it positively threw the little fellow's shadow back against the wall. He, meanwhile, extended his plump hand as he had seen his father and mother do, and watched the waving of the insect's wings with infantine delight. Nevertheless, there was a certain odd expression of sagacity that made Owen Warland feel as if here were old Pete Hovenden, partially, and but partially, redeemed from his hard scepticism into childish faith.

"How wise the little monkey looks!" whispered Robert Danforth to his wife.

"I never saw such a look on a child's face," answered Annie, admiring her own infant, and with good reason, far more than the artistic butterfly. "The darling knows more of the mystery than we do."

As if the butterfly, like the artist, were conscious of something not entirely congenial in the child's nature, it alternately sparkled and grew dim. At length it arose from the small hand of the infant with an airy motion that seemed to bear it upward without an effort, as if the ethereal instincts with which its master's spirit had endowed it impelled this fair vision involuntarily to a higher sphere. Had there been no obstruction, it might have soared into the sky and grown immortal. But its lustre gleamed upon the ceiling; the exquisite texture of its wings brushed against that earthly medium; and a sparkle or two, as of stardust, floated downward and lay glimmering on the carpet. Then the butterfly came fluttering down, and, instead of returning to the infant, was apparently attracted towards the artist's hand.

"Not so! not so!" murmured Owen Warland, as if his handiwork could have understood him. "Thou has gone forth out of thy master's heart. There is no return for thee."

With a wavering movement, and emitting a tremulous radiance, the butterfly struggled, as it were, towards the infant, and was about to alight upon his finger; but while it still hovered in the air, the little child of strength, with his grandsire's sharp and shrewd expression in his face, made a snatch at the marvellous insect and compressed it in his hand. Annie screamed. Old Peter Hovenden burst into a cold and scornful laugh. The blacksmith, by main force, unclosed the infant's hand, and found within the palm a small heap of glittering fragments, whence the mystery of beauty had fled forever. And as for Owen Warland, he looked placidly at what seemed the ruin of his life's labor, and which was yet no ruin. He had caught a far other butterfly than this. When the artist rose high enough to achieve the beautiful, the

symbol by which he made it perceptible to mortal senses became of little value in his eyes while his spirit possessed itself in the enjoyment of the reality.



# "The Bell-Tower"

Herman Melville

(1855)

In the south of Europe, nigh a once frescoed capital, now with dank mould cankering its bloom, central in a plain, stands what, at distance, seems the black mossed stump of some immeasurable pine, fallen, in forgotten days, with Anak and the Titan.

As all along where the pine tree falls, its dissolution leaves a mossy mound—last-flung shadow of the perished trunk; never lengthening, never lessening; unsubject to the fleet falsities of the sun; shade immutable, and true gauge which cometh by prostration—so westward from what seems the stump, one steadfast spear of lichen ruin veins the plain.

From that treetop, what birded chimes of silver throats had rung. A stone pine; a metallic aviary in its crown: the Bell-Tower, built by the great mechanician, the unblest foundling, Bannadonna.

Like Babel's, its base was laid in a high hour of renovated earth, following the second deluge, when the waters of the Dark Ages had dried up, and once more the green appeared. No wonder that, after so long and deep submersion, the jubilant expectation of the race should, as with Noah's sons, soar into Shinar aspiration.

In firm resolve, no man in Europe at that period went beyond Bannadonna. Enriched through commerce with the Levant, the state in which he lived voted to have the noblest Bell-Tower in Italy. His repute assigned him to be architect.

Stone by stone, month by month, the tower rose. Higher, higher; snail-like in pace, but torch or rocket in its pride.

After the masons would depart, the builder, standing alone upon its ever-ascending summit, at close of every day, saw that he overtopped still higher walls and trees. He would tarry till a late hour there, wrapped in schemes of other and still loftier piles. Those who of saints' days thronged the spot—hanging to the rude poles of scaffolding, like sailors on yards, or bees on boughs, unmindful of lime and dust, and falling chips of stone—their homage not the less inspirited him to self-esteem.

At length the holiday of the Tower came. To the sound of viols, the climax-stone slowly rose in air, and, amid the firing of ordnance, was laid by Bannadonna's hands upon the final course. Then mounting it, he stood erect, alone, with folded arms, gazing upon the white summits of blue inland Alps, and whiter crests of bluer Alps off-shore—sights invisible from the plain. Invisible, too, from thence was that eye he turned below, when, like the cannon booms, came up to him the people's combustions of applause.

That which stirred them so was, seeing with what serenity the builder stood three hundred feet in air, upon an unrailed perch. This none but he durst do. But his periodic standing upon the pile, in each stage of its growth—such discipline had its last result.

Little remained now but the bells. These, in all respects, must correspond with their receptacle.

The minor ones were prosperously cast. A highly enriched one followed, of a singular make, intended for suspension in a manner before unknown. The purpose of this bell, its rotary motion, and connection with the clockwork, also executed at the time, will, in the sequel, receive mention.

In the one erection, bell-tower and clock tower were united, though, before that period, such structures had commonly been built distinct; as the Campanile and Torre del 'Orologio of St. Mark to this day attest.

But it was upon the great state-bell that the founder lavished his more daring skill. In vain did some of the less elated magistrates here caution him; saying that though truly the tower was Titanic, yet limit should be set to the dependent weight of its swaying masses. But undeterred, he prepared his mammoth mould, dented with mythological devices; kindled his fires of balsamic firs; melted his tin and copper, and, throwing in much plate, contributed by the public spirit of the nobles, let loose the tide.

The unleashed metals bayed like hounds. The workmen shrunk. Through their fright, fatal harm to the bell was dreaded. Fearless as Shadrach, Bannadonna, rushing through the glow, smote the chief culprit with his ponderous ladle. From the smitten part, a splinter was dashed into the seething mass, and at once was melted in.

Next day a portion of the work was heedfully uncovered. All seemed right. Upon the third morning, with equal satisfaction, it was bared still lower. At length, like some old Theban king, the whole cooled casting was disinterred. All was fair except in one strange spot. But as he suffered no one to attend him in these inspections, he concealed the blemish by some

preparation which none knew better to devise.

The casting of such a mass was deemed no small triumph for the caster; one, too, in which the state might not scorn to share. The homicide was overlooked. By the charitable that deed was but imputed to sudden transports of esthetic passion, not to any flagitious quality. A kick from an Arabian charger; not sign of vice, but blood.

His felony remitted by the judge, absolution given him by the priest, what more could even a sickly conscience have desired.

Honoring the tower and its builder with another holiday, the republic witnessed the hoisting of the bells and clockwork amid shows and pomps superior to the former.

Some months of more than usual solitude on Bannadonna's part ensued. It was not unknown that he was engaged upon something for the belfry, intended to complete it, and surpass all that had gone before. Most people imagined that the design would involve a casting like the bells. But those who thought they had some further insight, would shake their heads, with hints, that not for nothing did the mechanician keep so secret. Meantime, his seclusion failed not to invest his work with more or less of that sort of mystery pertaining to the forbidden.

Ere long he had a heavy object hoisted to the belfry, wrapped in a dark sack or cloak—a procedure sometimes had in the case of an elaborate piece of sculpture, or statue, which, being intended to grace the front of a new edifice, the architect does not desire exposed to critical eyes, till set up, finished, in its appointed place. Such was the impression now. But, as the object rose, a statuary present observed, or thought he did, that it was not entirely rigid, but was, in a manner, pliant. At last, when the hidden thing had attained its final height, and, obscurely seen from below, seemed almost of itself to step into the belfry, as if with little assistance from the crane, a shrewd old blacksmith present ventured the suspicion that it was but a living man. This surmise was thought a foolish one, while the general interest failed not to augment.

Not without demur from Bannadonna, the chief magistrate of the town, with an associate—both elderly men—followed what seemed the image up the tower. But, arrived at the belfry, they had little recompense. Plausibly entrenching himself behind the conceded mysteries of his art, the mechanician withheld present explanation. The magistrates glanced toward the cloaked object, which, to their surprise, seemed now to have changed its

attitude, or else had before been more perplexingly concealed by the violent muffling action of the wind without. It seemed now seated upon some sort of frame, or chair, contained within the domino. They observed that nigh the top, in a sort of square, the web of the cloth, either from accident or design, had its warp partly withdrawn, and the cross threads plucked out here and there, so as to form a sort of woven grating. Whether it were the low wind or no, stealing through the stone latticework, or only their own perturbed imaginations, is uncertain, but they thought they discerned a slight sort of fitful, spring-like motion, in the domino. Nothing, however incidental or insignificant, escaped their uneasy eyes. Among other things, they pried out, in a corner, an earthen cup, partly corroded and partly encrusted, and one whispered to the other, that this cup was just such a one as might, in mockery, be offered to the lips of some brazen statue, or, perhaps, still worse.

But, being questioned, the mechanic said, that the cup was simply used in his founder's business, and described the purpose; in short, a cup to test the condition of metals in fusion. He added, that it had got into the belfry by the merest chance.

Again, and again, they gazed at the domino, as at some suspicious incognito at a Venetian mask. All sorts of vague apprehensions stirred them. They even dreaded lest, when they should descend, the mechanic, though without a flesh and blood companion, for all that, would not be left alone.

Affecting some merriment at their disquietude, he begged to relieve them, by extending a coarse sheet of workman's canvas between them and the object.

Meantime he sought to interest them in his other work; nor, now that the domino was out of sight, did they long remain insensible to the artistic wonders lying round them; wonders hitherto beheld but in their unfinished state; because, since hoisting the bells, none but the caster had entered within the belfry. It was one trait of his, that, even in details, he would not let another do what he could, without too great loss of time, accomplish for himself. So, for several preceding weeks, whatever hours were unemployed in his secret design, had been devoted to elaborating the figures on the bells.

The clock bell, in particular, now drew attention. Under a patient chisel, the latent beauty of its enrichments, before obscured by the cloudings incident to casting, that beauty in its shyest grace, was now revealed. Round and round the bell, twelve figures of gay girls, garlanded, hand-in-hand, danced in a choral ring—the embodied hours.

"Bannadonna," said the chief, "this bell excels all else. No added touch could here improve. Hark!" hearing a sound, "was that the wind?"

"The wind, Excellenza," was the light response. "But the figures, they are not yet without their faults. They need some touches yet. When those are given, and the—block yonder," pointing towards the canvas screen, "when Haman there, as I merrily call him,—him? *it*, I mean—when Haman is fixed on this, his lofty tree, then, gentlemen, will I be most happy to receive you here again."

The equivocal reference to the object caused some return of restlessness. However, on their part, the visitors forbore further allusion to it, unwilling, perhaps, to let the foundling see how easily it lay within his plebeian art to stir the placid dignity of nobles.

"Well, Bannadonna," said the chief, "how long ere you are ready to set the clock going, so that the hour shall be sounded? Our interest in you, not less than in the work itself, makes us anxious to be assured of your success. The people, too,—why, they are shouting now. Say the exact hour when you will be ready."

"Tomorrow, Excellenza, if you listen for it,—or should you not, all the same—strange music will be heard. The stroke of one shall be the first from yonder bell," pointing to the bell adorned with girls and garlands, "that stroke shall fall there, where the hand of Una clasps Dua's. The stroke of one shall sever that loved clasp. Tomorrow, then, at one o'clock, as struck here, precisely here," advancing and placing his finger upon the clasp, "the poor mechanic will be most happy once more to give you liege audience, in this his littered shop. Farewell till then, illustrious magnificoes, and hark ye for your vassal's stroke."

His still, Vulcanic face hiding its burning brightness like a forge, he moved with ostentatious deference towards the scuttle, as if so far to escort their exit. But the junior magistrate, a kind-hearted man, troubled at what seemed to him a certain sardonical disdain, lurking beneath the foundling's humble mien, and in Christian sympathy more distressed at it on his account than on his own, dimly surmising what might be the final fate of such a cynic solitaire, nor perhaps uninfluenced by the general strangeness of surrounding things, this good magistrate had glanced sadly, sideways from the speaker, and thereupon his foreboding eye had started at the expression of the unchanging face of the Hour Una.

"How is this, Bannadonna?" he lowly asked, "Una looks unlike her

sisters."

"In Christ's name, Bannadonna," impulsively broke in the chief, his attention, for the first attracted to the figure, by his associate's remark, "Una's face looks just like that of Deborah, the prophetess, as painted by the Florentine, Del Fonca."

"Surely, Bannadonna," lowly resumed the milder magistrate, "you meant the twelve should wear the same jocundly abandoned air. But see, the smile of Una seems but a fatal one. 'Tis different."

While his mild associate was speaking, the chief glanced, inquiringly, from him to the caster, as if anxious to mark how the discrepancy would be accounted for. As the chief stood, his advanced foot was on the scuttle's curb.

Bannadonna spoke:

"Eccellenza, now that, following your keener eye, I glance upon the face of Una, I do, indeed perceive some little variance. But look all round the bell, and you will find no two faces entirely correspond. Because there is a law in art—but the cold wind is rising more; these lattices are but a poor defense. Suffer me, magnificoes, to conduct you, at least, partly on your way. Those in whose well-being there is a public stake, should be heedfully attended."

"Touching the look of Una, you were saying, Bannadonna, that there was a certain law in art," observed the chief, as the three now descended the stone shaft, "pray, tell me, then—."

"Pardon; another time, Eccellenza;—the tower is damp."

"Nay, I must rest, and hear it now. Here,—here is a wide landing, and through this leeward slit, no wind, but ample light. Tell us of your law; and at large."

"Since, Eccellenza, you insist, know that there is a law in art, which bars the possibility of duplicates. Some years ago, you may remember, I graved a small seal for your republic, bearing, for its chief device, the head of your own ancestor, its illustrious founder. It becoming necessary, for the customs' use, to have innumerable impressions for bales and boxes, I graved an entire plate, containing one hundred of the seals. Now, though, indeed, my object was to have those hundred heads identical, and though, I dare say, people think them; so, yet, upon closely scanning an uncut impression from the plate, no two of those five-score faces, side by side, will be found alike. Gravity is the air of all; but, diversified in all. In some, benevolent; in some, ambiguous; in two or three, to a close scrutiny, all but incipiently malign, the

variation of less than a hair's breadth in the linear shadings round the mouth sufficing to all this. Now, Eccellenza, transmute that general gravity into joyousness, and subject it to twelve of those variations I have described, and tell me, will you not have my hours here, and Una one of them? But I like—."

"Hark! is that—a footfall above?"

"Mortar, Eccellenza; sometimes it drops to the belfry floor from the arch where the stonework was left undressed. I must have it seen to. As I was about to say: for one, I like this law forbidding duplicates. It evokes fine personalities. Yes, Eccellenza, that strange, and—to you—uncertain smile, and those fore-looking eyes of Una, suit Bannadonna very well."

"Hark!—sure we left no soul above?"

"No soul, Eccellenza; rest assured, *no soul*—Again the mortar."

"It fell not while we were there."

"Ah, in your presence, it better knew its place, Eccellenza," blandly bowed Bannadonna.

"But, Una," said the milder magistrate, "she seemed intently gazing on you; one would have almost sworn that she picked you out from among us three."

"If she did, possibly, it might have been her finer apprehension, Eccellenza."

"How, Bannadonna? I do not understand you."

"No consequence, no consequence, Eccellenza—but the shifted wind is blowing through the slit. Suffer me to escort you on; and then, pardon, but the toiler must to his tools."

"It may be foolish, Signor," said the milder magistrate, as, from the third landing, the two now went down unescorted, "but, somehow, our great mechanic moves me strangely. Why, just now, when he so superciliously replied, his walk seemed Sisera's, God's vain foe, in Del Fonca's painting. And that young, sculptured Deborah, too. Ay, and that—."

"Tush, tush, Signor!" returned the chief. "A passing whim. Deborah?—Where's Jael, pray?"

"Ah," said the other, as they now stepped upon the sod, "Ah, Signor, I see you leave your fears behind you with the chill and gloom; but mine, even in this sunny air, remain, Hark!"

It was a sound from just within the tower door, whence they had emerged. Turning, they saw it closed.

"He has slipped down and barred us out," smiled the chief; "but it is his

custom."

Proclamation was now made, that the next day, at one hour after meridian, the clock would strike, and—thanks to the mechanic's powerful art—with unusual accompaniments. But what those should be, none as yet could say. The announcement was received with cheers.

By the looser sort, who encamped about the tower all night, lights were seen gleaming through the topmost blind-work, only disappearing with the morning sun. Strange sounds, too, were heard, or were thought to be, by those whom anxious watching might not have left mentally undisturbed—sounds, not only of some ringing implement, but also—so they said—half-suppressed screams and plainings, such as might have issued from some ghostly engine, overplied.

Slowly the day drew on; part of the concourse chasing the weary time with songs and games, till, at last, the great blurred sun rolled, like a football, against the plain.

At noon, the nobility and principal citizens came from the town in cavalcade, a guard of soldiers, also, with music, the more to honor the occasion.

Only one hour more. Impatience grew. Watches were held in hands of feverish men, who stood, now scrutinizing their small dial plates, and then, with neck thrown back, gazing toward the belfry, as if the eye might foretell that which could only be made sensible to the ear; for, as yet, there was no dial to the tower clock.

The hour hands of a thousand watches now verged within a hair's breadth of the figure 1. A silence, as of the expectation of some Shiloh, pervaded the swarming plain. Suddenly a dull, mangled sound—naught ringing in it; scarcely audible, indeed, to the outer circles of the people—that dull sound dropped heavily from the belfry. At the same moment, each man stared at his neighbor blankly. All watches were upheld. All hour hands were at—had passed—the figure 1. No bell-stroke from the tower. The multitude became tumultuous.

Waiting a few moments, the chief magistrate, commanding silence, hailed the belfry, to know what thing unforeseen had happened there.

No response.

He hailed again and yet again.

All continued hushed.

By his order, the soldiers burst in the tower door; when, stationing



guards to defend it from the now surging mob, the chief, accompanied by his former associate, climbed the winding stairs. Halfway up, they stopped to listen. No sound. Mounting faster, they reached the belfry; but, at the threshold, started at the spectacle disclosed. A spaniel, which, unbeknown to them, had followed them thus far, stood shivering as before some unknown monster in a brake: or, rather, as if it snuffed footsteps leading to some other world.

Bannadonna lay, prostrate and bleeding, at the base of the bell which was adorned with girls and garlands. He lay at the feet of the hour Una; his head coinciding, in a vertical line, with her left hand, clasped by the hour Dua. With downcast face impending over him, like Jael over nailed Sisera in the tent, was the domino; now no more becloaked.

It had limbs, and seemed clad in a scaly mail, lustrous as a dragon beetle's. It was manacled, and its clubbed arms were uplifted, as if, with its manacles, once more to smite its already smitten victim. One advanced foot of it was inserted beneath the dead body, as if in the act of spurning it.

Uncertainty falls on what now followed.

It were but natural to suppose that the magistrates would, at first, shrink from immediate personal contact with what they saw. At the least, for a time, they would stand in involuntary doubt; it may be, in more or less of horrified alarm. Certain it is, that an arquebuss was called for from below. And some add, that its report, followed by a fierce whiz, as of the sudden snapping of a main spring, with a steely din, as if a stack of sword blades should be dashed upon a pavement, these blended sounds came ringing to the plain, attracting every eye far upward to the belfry, whence, through the latticework, thin wreaths of smoke were curling.

Some averred that it was the spaniel, gone mad by fear, which was shot. This, others denied. True it was, the spaniel never more was seen; and, probably, for some unknown reason, it shared the burial now to be related of the domino. For, whatever the preceding circumstances may have been, the first instinctive panic over, or else all ground of reasonable fear removed, the two magistrates, by themselves, quickly rehooded the figure in the dropped cloak wherein it had been hoisted. The same night, it was secretly lowered to the ground, smuggled to the beach, pulled far out to sea, and sunk. Nor to any after urgency, even in free convivial hours, would the twain ever disclose the full secrets of the belfry.

From the mystery unavoidably investing it, the popular solution of the

foundling's fate involved more or less of supernatural agency. But some few less unscientific minds pretended to find little difficulty in otherwise accounting for it. In the chain of circumstantial inferences drawn, there may, or may not, have been some absent or defective links. But, as the explanation in question is the only one which tradition has explicitly preserved, in dearth of better, it will here be given. But, in the first place, it is requisite to present the supposition entertained as to the entire motive and mode, with their origin, of the secret design of Bannadonna; the minds above-mentioned assuming to penetrate as well into his soul as into the event. The disclosure will indirectly involve reference to peculiar matters, none of, the clearest, beyond the immediate subject.

At that period, no large bell was made to sound otherwise than as at present, by agitation of a tongue within, by means of ropes, or percussion from without, either from cumbrous machinery, or stalwart watchmen, armed with heavy hammers, stationed in the belfry, or in sentry boxes on the open roof, according as the bell was sheltered or exposed.

It was from observing these exposed bells, with their watchmen, that the foundling, as was opined, derived the first suggestion of his scheme. Perched on a great mast or spire, the human figure, viewed from below, undergoes such a reduction in its apparent size, as to obliterate its intelligent features. It evinces no personality. Instead of bespeaking volition, its gestures rather resemble the automatic ones of the arms of a telegraph.

Musing, therefore, upon the purely Punchinello aspect of the human figure thus beheld, it had indirectly occurred to Bannadonna to devise some metallic agent, which should strike the hour with its mechanic hand, with even greater precision than the vital one. And, moreover, as the vital watchman on the roof, sallying from his retreat at the given periods, walked to the bell with uplifted mace, to smite it, Bannadonna had resolved that his invention should likewise possess the power of locomotion, and, along with that, the appearance, at least, of intelligence and will.

If the conjectures of those who claimed acquaintance with the intent of Bannadonna be thus far correct, no unenterprising spirit could have been his. But they stopped not here; intimating that though, indeed, his design had, in the first place, been prompted by the sight of the watchman, and confined to the devising of a subtle substitute for him: yet, as is not seldom the case with projectors, by insensible gradations, proceeding from comparatively pigmy aims to Titanic ones, the original scheme had, in its anticipated eventualities,

at last, attained to an unheard of degree of daring.

He still bent his efforts upon the locomotive figure for the belfry, but only as a partial type of an ulterior creature, a sort of elephantine Helot, adapted to further, in a degree scarcely to be imagined, the universal conveniences and glories of humanity; supplying nothing less than a supplement to the Six Days' Work; stocking the earth with a new serf, more useful than the ox, swifter than the dolphin, stronger than the lion, more cunning than the ape, for industry an ant, more fiery than serpents, and yet, in patience, another ass. All excellences of all God-made creatures, which served man, were here to receive advancement, and then to be combined in one. Talus was to have been the all-accomplished Helot's name. Talus, iron slave to Bannadonna, and, through him, to man.

Here, it might well be thought that, were these last conjectures as to the foundling's secrets not erroneous, then must he have been hopelessly infected with the craziest chimeras of his age; far outgoing Albert Magus and Cornelius Agrippa. But the contrary was averred. However marvelous his design, however apparently transcending not alone the bounds of human invention, but those of divine creation, yet the proposed means to be employed were alleged to have been confined within the sober forms of sober reason. It was affirmed that, to a degree of more than skeptic scorn, Bannadonna had been without sympathy for any of the vain-glorious irrationalities of his time. For example, he had not concluded, with the visionaries among the metaphysicians, that between the finer mechanic forces and the ruder animal vitality some germ of correspondence might prove discoverable. As little did his scheme partake of the enthusiasm of some natural philosophers, who hoped, by physiological and chemical inductions, to arrive at a knowledge of the source of life, and so qualify themselves to manufacture and improve upon it. Much less had he aught in common with the tribe of alchemists, who sought, by a species of incantations, to evoke some surprising vitality from the laboratory. Neither had he imagined, with certain sanguine theosophists, that, by faithful adoration of the Highest, unheard-of powers would be vouchsafed to man. A practical materialist, what Bannadonna had aimed at was to have been reached, not by logic, not by crucible, not by conjuration, not by altars; but by plain vice-bench and hammer. In short, to solve nature, to steal into her, to intrigue beyond her, to procure some one else to bind her to his hand;—these, one and all, had not been his objects; but, asking no favors from any element or any being, of

himself, to rival her, outstrip her, and rule her. He stooped to conquer. With him, common sense was theurgy; machinery, miracle; Prometheus, the heroic name for machinist; man, the true God.

Nevertheless, in his initial step, so far as the experimental automaton for the belfry was concerned, he allowed fancy some little play; or, perhaps, what seemed his fancifulness was but his utilitarian ambition collaterally extended. In figure, the creature for the belfry should not be likened after the human pattern, nor any animal one, nor after the ideals, however wild, of ancient fable, but equally in aspect as in organism be an original production; the more terrible to behold, the better.

Such, then, were the suppositions as to the present scheme, and the reserved intent. How, at the very threshold, so unlooked for a catastrophe overturned all, or rather, what was the conjecture here, is now to be set forth.

It was thought that on the day preceding the fatality, his visitors having left him, Bannadonna had unpacked the belfry image, adjusted it, and placed it in the retreat provided—a sort of sentry box in one corner of the belfry; in short, throughout the night, and for some part of the ensuing morning, he had been engaged in arranging everything connected with the domino; the issuing from the sentry box each sixty minutes; sliding along a grooved way, like a railway; advancing to the clock bell, with uplifted manacles; striking it at one of the twelve junctions of the four-and-twenty hands; then wheeling, circling the bell, and retiring to its post, there to bide for another sixty minutes, when the same process was to be repeated; the bell, by a cunning mechanism, meantime turning on its vertical axis, so as to present, to the descending mace, the clasped hands of the next two figures, when it would strike two, three, and so on, to the end. The musical metal in this time-bell being so managed in the fusion, by some art, perishing with its originator, that each of the clasps of the four-and-twenty hands should give forth its own peculiar resonance when parted.

But on the magic metal, the magic and metallic stranger never struck but that one stroke, drove but that one nail, served but that one clasp, by which Bannadonna clung to his ambitious life. For, after winding up the creature in the sentry box, so that, for the present, skipping the intervening hours, it should not emerge till the hour of one, but should then infallibly emerge, and, after deftly oiling the grooves whereon it was to slide, it was surmised that the mechanic must then have hurried to the bell, to give his final touches to its sculpture. True artist, he here became absorbed; and

absorption still further intensified, it may be, by his striving to abate that strange look of Una; which, though, before others, he had treated with such unconcern, might not, in secret, have been without its thorn.

And so, for the interval, he was oblivious of his creature; which, not oblivious of him, and true to its creation, and true to its heedful winding up, left its post precisely at the given moment; along its well-oiled route, slid noiselessly towards its mark; and, aiming at the hand of Una, to ring one clangorous note, dully smote the intervening brain of Bannadonna, turned backwards to it; the manacled arms then instantly up-springing to their hovering poise. The falling body clogged the thing's return; so there it stood, still impending over Bannadonna, as if whispering some post-mortem terror. The chisel lay dropped from the hand, but beside the hand; the oil flask spilled across the iron track.

In his unhappy end, not unmindful of the rare genius of the mechanic, the republic decreed him a stately funeral. It was resolved that the great bell—the one whose casting had been jeopardized through the timidity of the ill-starred workman—should be rung upon the entrance of the bier into the cathedral. The most robust man of the country round was assigned the office of bell-ringer.

But as the pallbearers entered the cathedral porch, naught but a broken and disastrous sound, like that of some lone Alpine landslide, fell from the tower upon their ears. And then, all was hushed.

Glancing backwards, they saw the groined belfry crashed sideways in. It afterwards appeared that the powerful peasant, who had the bell rope in charge, wishing to test at once the full glory of the bell, had swayed down upon the rope with one concentrate jerk. The mass of quaking metal, too ponderous for its frame, and strangely feeble somewhere at its top, loosed from its fastening, tore sideways down, and tumbling in one sheer fall, three hundred feet to the soft sward below, buried itself inverted and half out of sight.

Upon its disinterment, the main fracture was found to have started from a small spot in the ear; which, being scraped, revealed a defect, deceptively minute in the casting; which defect must subsequently have been pasted over with some unknown compound.

The remolten metal soon reassumed its place in the tower's repaired superstructure. For one year the metallic choir of birds sang musically in its belfry-bough-work of sculptured blinds and traceries. But on the first

anniversary of the tower's completion—at early dawn, before the concourse had surrounded it—an earthquake came; one loud crash was heard. The stone-pine, with all its bower of songsters, lay overthrown upon the plain.

So the blind slave obeyed its blinder lord; but, in obedience, slew him. So the creator was killed by the creature. So the bell was too heavy for the tower. So the bell's main weakness was where man's blood had flawed it. And so pride went before the fall.

# "The Automaton of Dobello"

H. D. Jenkins

(1872)

A promise made to an old and faithful servant who had been many years in my family, led me, on a late visit to Switzerland, out of the usual line of travel; so far away from the pathway of most tourists that, had it not been for the very particular directions I received at home, I should never have found the village of which I was in search. The name was in none of the guide books in the hands of tourists, even the most careful of them failing to note a town which must once have been a place of considerable importance; but which now is almost deserted and well nigh a ruin.

Leaving Locarno, at the upper end of Lago Maggiore, I took the St. Gothard road through Bellinzona, as far as Biasca. Here, turning to the right hand, it was necessary to follow the ascent of the Lucmanier pass; the summit of which being accomplished, I came in the course of a short descent upon the hospice of Sta. Maria. This pass, so little known now, was the route by which Pepin's army, in A. D. 754, advanced to the invasion of Italy. At Sta. Maria a path leads to the west up the Val Cadelina, beside the torrent which, falling from Lake Dim, constitutes one of the confluent of the Middle Rhine. Thus far the route may be traced upon the map in Murray's Handbook.

It was here, remembering the directions that had been given me, that I noticed what any traveller might easily overlook, the remains of extensive fortifications. So used does one become to the piled-up *debris* of avalanches, that it would be easy to pass the overthrown works without distinguishing their true character. But being upon the lookout for these landmarks, I found that here had evidently been a stronghold, at once a defence and an ambush. Apparently the intent had been to draw the enemy on by presenting the promise of an easy victory. The Milanese, with whom these mountaineers carried on incessant war for so many years, would count on an easy triumph when, having reached the summit of the pass, they found themselves assisted in a charge by the momentum of the descent. It is probable also that the defences were constructed out of the talis of the mountains, so that even at their best an enemy would come upon them with scarce a suspicion of their

true character. But the momentum of descent would be lost in the wide stretch lying at the base of the descent, except in the case of a most sustained onset, while the defences were evidently as impregnable as they were well nigh invisible. An army caught in this trap would be certain of utter annihilation. I speak of these defences, not simply because they were interesting, but because, as I afterward learned, they are associated with the history of the wonderful Automaton of Dobello, which I was so fortunate as to see.

I arrived at Santa Maria on the 18th of May, nearly a month before the beginning of the little summer travel that yet dribbles through the pass. By the time I had examined the remains here spoken of, it was too late to make Dobello in the same day; and being assured that there was no chance for shelter between it and Santa Maria, no alternative was offered. I must make the not very attractive little hospice my quarters for the night.

As I sat by the large open fireplace in the evening, drying my shoes and leggings by the fire, and enjoying the slippers taken from my knapsack, my attention was arrested by the conversation of a half dozen peasants who were drinking their sour wine by one of the hardwood tables which constituted almost the sole furniture of the room. Although their *patois* was not wholly intelligible, I found that they were excitedly rehearsing a half score of different legends about a certain automaton which was said to have existed in the church of Dobello, and which was believed by them to be still there. Each one had a different version of the same story, but upon the substance of the narrative they were pretty well agreed. It seemed that the four hundredth anniversary of a certain contest between the Swiss and Milanese was close at hand; and these mountaineers were strong in the faith that upon every hundredth anniversary this automaton appeared, and in intelligible speech cursed the memory of the men who by treason wrought disaster to the cause of the Swiss.

No one claimed to know definitely the story of the maker, some having heard it ascribed to the unknown artist who assisted Bishop Berthold of Bucheck in the construction of the first astronomical clock of Strasburg. But if the automaton was made about A. D. 1472, it was made one hundred years later than the Clock of the Three Sages, with which the Bishop and his unknown helper astonished Europe; while such date is ninety-eight years earlier than the completion of the present wonder of the cathedral. There seemed more probability to the story which associated its origin with the



name of the builder of the clock tower of Venice; inasmuch as the automata of St. Mark's are known to have been finished in A. D. 1490.

It was fortunate for me, both that my curiosity had been aroused and guides had been found ready at hand, otherwise it is doubtful whether I should ever have reached Dobello at all. I had noticed a path the day before, leading up the Val Cadelina; but when I had pursued it for half an hour in the morning of the next day, it suddenly disappeared. A vast landslide had obliterated everything like a path upon this side of the valley. While standing in utter astonishment, as if suddenly come upon the world's jumping-off place, I heard the voices of peasants down the path. Turning about and retracing my steps a short distance I was just in time to see them making their way up a steep zigzag, which, coming into the lower path at a sharp angle, had been passed unnoticed by me. By rapid climbing I managed to overtake them just as they gained a broad ledge of rock, from which the ascent was by a series of ladders, similar to those which lead from the gorge of the Dala to the hamlet of Albinen above Leukerbad. These men proved to be the persons to whose talk I had listened the night before. After a little difficulty in making myself understood, they were well pleased to admit me to their company.

I should have made sorry work without them, for a more blind trail I never attempted. The ascent which we had just made was followed by a corresponding drop, down all sorts of declivities, until we struck upon a piece of well-constructed roadway, showing that there had once been a broad highway up the valley, built with that care and outlay which indicated the approach to a town of no inconsiderable importance. Twice we went above the snow line, my companions following the unseen path by landmarks only visible to their practised eyes. It was close upon noon, when, passing over a high shoulder, we looked suddenly down upon the town of Dobello itself.

My surprise may be imagined when I say that I looked down, not upon the little dot of a lake represented by the map of the guidebook, but upon a beautiful sheet of water, several miles in circumference, surrounded by meadows as beautiful as those of Chamounix, reflecting in its waters the walls of a town capable of containing six or eight thousand inhabitants. The hills rose about it like the walls of a well, in a nearly true circle; in places as abrupt as the rocky face which overshadows Leukerbad, in other places affording a steep pasturage as upon the slopes to the south of the lake and hospice of the Grimsel, above the Rhone glacier. The town was, like all in Switzerland and especially in southern Switzerland, compactly built, but in

addition was surrounded by a heavy wall more or less broken; having at its upper end, and farthest removed from the lake, a broad plateau, upon which stood the church in which the automaton was said to be. The position of the church reminded me of that one which overlooks Lugano, but the campanile was unique, consisting of not less than eight stories piled one upon the other, the highest being surmounted by a ridge roof. Beside it, upon the same terrace, were the ruins of a mediaeval castle; and built to it as a part of itself, on the side opposite the castle, a bone house, such as is common in the villages of northern Italy, but something that I had never seen before in a place of the pretensions of Dobello.

When we descended the *Col* over which we had come, I found fresh evidence of the former importance of the place; for we struck upon a causeway, which, following the outlet of the lake, had once led around the hill through a gorge now impassable. This road left the town by a gateway with double towers. It was evident that here had been a stronghold of the Swiss, a place where, in case of disaster, their forces might retreat and defy all following.

Just as we entered the gate, it chanced that we encountered the Curé of Dobello, who not only returned our salutation but proffered a friendly hand. Recognizing me, both by dress and accent, as a foreigner, he could not forbear many expressions of astonishment; for he assured me that I was the only person not Swiss-born that he had seen in Dobello during his charge of many years. It was impossible to decline the hospitality he offered, since there was not an inn for the accommodation of travellers in the place. My companions were to quarter themselves upon their friends, after the free fashion of all peasants.

The Curé was a man of social temperament, and an enthusiastic believer in the existence of the automaton. After dinner he told me the story of it, so far as it is known. In A. D. 1472, the Milanese held Bellinzona as a strong military outpost. From this they had frequently made forays up the St. Gothard pass, but they had never succeeded in reaching the summit of the Lucmanier. More than once their forces, when retreating from the St. Gothard, had been fallen upon by the hardy warriors of Canton Uri, led by the men of Dobello. From Biasca to Arbeddo, the two villages near the junction of these passes, is one oft-fought-over battle field, upon which huge burial mounds are to be seen to this day.

It naturally became the one ambition of the Milanese to break through

the defences of the Lucmanier and many years were spent in plots and strategies. Not since 1422, when the Swiss ventured as far down the valley as Arbeddo only to suffer a terrible defeat, had the Milanese been able to meet them in an open field. There was scarcely a man in the Canton but had been approached, directly or indirectly, by bribes; but not until 1472 were any found willing to sell their knowledge of the mountains' secret passes to the enemy. In that year three men of Dobello agreed to conduct a band of the Lombards by certain hunters' paths to the heights overlooking and commanding the works which I had seen at Santa Maria. The result was the complete annihilation of the troops holding this pass; and Dobello became a prison to its own people. Shut up in a *cul-de-sac*, there was neither egress nor ingress.

It was not long before the betrayers were discovered. The castle joining the church was then occupied by Commander Uomo, a man who never was seen in public but once after the massacre at Sta. Maria; and that once was when he dragged back with him the men convicted of treason.

Much that follows is mere conjecture.

The town was driven to such straits that Uomo and the traitors in his keeping were alike forgotten. The people had largely supported themselves by spinning silk and weaving the lighter sort of fabrics. It was alike impossible to convey any adequate supplies of food to them, or to support the then population of the town upon what little could be raised in the meadows about the little lake. Many of the men worked their way across the mountains to the St. Gothard pass, and others succeeded in reaching Perdatsch in the lower valley. Not a few perished in the mountains; and in the course of three years scarcely any remained, except women and children. In the midst of all this distress, Uomo had caused an addition to be built to the bone house adjoining the church on the side opposite the castle. What it was for, no one seemed to know or care; but at last, when it was finished, Uomo himself had disappeared. It was found that no opening connected this addition with the other part of the charnel house; no windows were to be found in it; only two heavy doors appeared, one of which opened from the church, the other was in the outer wall opposite. Many supposed that the commander had died alone in his castle; many that he had closed upon himself the curious vault lately built. From that time forward no one ever stepped inside the castle, now in ruins; and no one tried to discover the secrets of his supposed tomb.

As is well known, the Milanese suffered defeat at the hands of the

Swiss in 1478, six years later, not only both passes but Bellinzona itself passing into their hands. But the avalanches had so far swept away or covered up the causeway leading up the Val Cadelina, and so many of the inhabitants had deserted it, that no attempt seems to have been made to re-occupy the now useless stronghold.

The handful that remained, with true Swiss pertinacity clung to the crumbling town. The outer world seems for an indefinite time to have been wholly forgotten. Now and then an avalanche buried half their numbers. Occasionally one, like the old servant whose family I had promised to look up, climbed over the mountains and drifted away, no one in Dobello knew whither. The present population, the Curé assured me, was not over two or three hundred; and the rough path by which I had come had been constructed since he came to the place, less than twenty-five years ago.

As to the automaton, he was not only an enthusiastic believer in its existence, but he showed me the written testimony of a predecessor in his present charge, who claimed to have seen a moving, speaking figure in the vault behind the bone house. According to this statement, we might expect the mysterious doors to open of themselves for the fourth time, at noon of the third day after my arrival; and at one o'clock they would be closed again for another hundred years.

I spent the intervening time in a critical exploration of this almost buried village. Everywhere I found evidence of the former importance of the place; but whole streets now appeared to have been unused for two or three centuries. The church did not differ particularly from those of corresponding Swiss towns, except in the strong oak doors that opened out of the choir into the vault built by Uomo behind the charnel house.

During these three days, scores of peasants from villages in all the neighboring valleys came clambering over the mountains that shut in Dobello; and by noon of the 19th, every foot of space in the gloomy old church was filled.

Not a whisper was heard during the service of the Mass. The very silence of death seemed to have fallen upon the people; the chanting of priest and choir sounded as if In some deep cavern of the earth.

Precisely at twelve o'clock the altar bell tinkled for the Elevation of the Host; and as the priest solemnly lifted the monstrant above the heads of the people, the mysterious doors at the right of the choir swung open with a dull thud.

I shall never forget the groan that burst from the lips of the awe-struck crowd. They crouched down upon the pavement of the church like wild beasts huddling in terror at the burst of a storm. I confess that my own heart for the moment beat like a drum, and the blood seemed to rush in a flood upon my brain. In an instant however I was myself again; and I saw the priest calmly waving the Host to and fro toward the terrified congregation. I saw then that the light was pouring through the just opened doors, showing that the outer door of the vault was also open, so that a passage was clear from the choir through the vault to the terrace beyond.

It must have been five minutes before courage was so far restored that curiosity began to awaken. The priest, still holding aloft the monstrant, beckoned to the choir boys to take the crucifix and sacred banners that stood behind the altar. Without a word the procession was formed, the priest at the head, followed by the still trembling choir. Motioning to the people to follow, the priest began a processional chant, the choir answering with subdued, uncertain responses. Slowly the Host and Crucifix began to move toward the open doors; slowly the peasants began to form behind them, not daring to refuse the following, trembling with excitement to see the secrets of the vault, yet elbowing each other into the foremost places, and glancing timidly around for convenient chances to retreat if need be.

It took a moment for the eye to become accustomed to the light which, pouring in through the wide outer door, was a violent change from the deep twilight of the church. Then I started to see a human form seated in a carved chair, a little to one side of the outer door, so as to be in half shadow. Before it were three closed tombs, with oaken sides and top, which the figure was apparently watching.

The priest walked around behind these wooden sarcophagi so as to leave the passage free by them, from the door that opened out of the church to the opposite door that led out into the yard. Just as he had done so, the crucifix-bearer and choir following him, the open-eyed crowd of peasants bulging into the vault, the foremost of them still crowding back and those behind shouldering forward, the light from the outer door shining full in their white faces and round eyes,—the figure in the chair slowly rose, and at the same instant the sides of all the tombs fell banging upon the pavement.

Again a panic smote the peasants, and a struggling mass was seen fighting itself into a dense jam that stuck tightly in the doorway. But with the tinkling of the bell and the renewed waving of the monstrant above the

disclosed tombs, the people began to be reassured; when for the third time terror overpowered them, to hear issuing from the mouth of the mysterious form the sounds of human speech. They would have trodden upon one another, had not the priest began an *Ave Maria*, which from force of habit brought them all upon their knees. At its conclusion the priest, turning toward the people who were still kneeling in the doorway and far back into the choir of the church, said:

"My children, the voice which you have just heard asked that the people of these mountains should see and always remember the punishment due to those who would betray their country and its cause. I command you, therefore, to pass by these tombs, where are exposed the remains of men who, four hundred years ago today, for gold, sold the lives and liberties of their fellows."

It was then, ashamed of their fears, that the bravest began to come forward, until presently the whole congregation was filing by the tombs, above which the priest still stood. So mysterious were the automatic movements of the doors of the oaken covers of the sarcophagi and of this human figure, that it required the authority of the priest to dispel their fears of its super-naturalness.

As for myself, I used every moment in a swift study of this wonderful automatic chamber. The figure was of walnut and bronze, fully armed and equipped as a general of Swiss troops. There could be no doubt that it was an image of Uomo himself. The chair upon which it sat had a closed bottom, in which undoubtedly was concealed a part of the machinery by which the movements of the figure are governed. As to the voice, I cannot conceive the mechanism by which it was produced, though the sounds seemed to come from the body, finding vent only by the half-open mouth. The articulation was indistinct, and the meaning I am sure was more than half guessed at by my friend the Curé.

The large stones and perfect joining of the pavement showed that rods, bars, or chains, which moved the doors and oaken covers, were concealed here; and it is more than probable that the source of power itself is concealed beneath the floor.

The tombs, as disclosed by the fall of the covers, were of marvellous workmanship. To all appearance the sides consisted of the finest modern plate glass; the top being of oak plank, the bottom of stone. Those who have seen the shrine of San Carlo Borromeo in the Duomo at Milan, will

remember the wonderful shrine of rock crystal in which the body is enclosed. That crystal is from Perdatsch, a little below Santa Maria; and these cases must have been made of the same.

But the sight in each was enough to chill one's blood. Three skeletons lay there, each loaded with chains; neither flesh nor clothing being wholly decayed, but lying upon the bones in patches. There could be no doubt, from their positions, that the wretched men had been shut in these tombs while yet living, or that he who had taken revenge upon them in the name of the republic, had spent his own last days here, in first watching their dying, and then contriving the elaborate automaton that was to perpetuate the cursing of their names. One body was lying upon its back, the limbs outspread; another was crowded close into one corner, lying in a heap; while the third had died sitting against one end of his tomb, and this being probably closed more tightly than the others, the body was there dried like a mummy.

At five minutes before one o'clock, the oaken covers moved upon their hinges and closed with a clang as of sharp springs. The figure, which had remained rigidly standing, waved one stiff arm toward the door, and, unbending, seated itself in the chair. The doors began to close very slowly with a loud rattling sound, as if to give warning; and at one o'clock precisely, the Curé and myself, trying each door, found it closed as firmly as if made of iron, shutting up the Automaton of Dobello to another century of darkness, and of silence.

# **In Love—But Not With an Automaton**

"The Mullenville Mystery"

"In Love with an Automaton"

Along with H. D. Jenkins' ornate Automaton of Dobello, the 1870s brought several faux automaton stories. The minor trend was perhaps set by James Payn's "Mosco's Automaton" (a story not included in this collection). "Mosco's Automaton" is a very short piece in which a dullard is sent to work for a magician. When his parents finally see the show they are quite convinced that the conjurer's automaton is their son. By the late 1800s, it was common knowledge that if the actions of an automaton were too good to be true, they probably were. That wasn't to say that there weren't automata and automaton acts of immense sophistication, but it was easier, and perhaps more comfortable, to attribute actions to a completely human actor.

Julian Hawthorne (1846–1934) is the son of Nathaniel Hawthorne. Though the posthumous editor of his father's works and a biographer of the senior Hawthorne, Julian was a author in his own right as well as a civil engineer. "The Mullenville Mystery" was published in 1872 in *The Century Magazine* and was healthily republished. In a reversal of Hoffmann's "The Sand-Man," it's young Nellie Swansdown who claims that, during an argument, she'd rather marry an automaton than her intellectual beau. He takes that as a challenge.

The second story of this section, "In Love with an Automaton," was unfortunately not attributed to an author when published in *Frank Leslie's Popular Monthly* in 1878. This is a shame. Though short, it is a well written story about a young man who falls in love with the female mind behind a mechanical chess-playing George Washington. Unfortunately, chess-prodigy Ollie doesn't continue her career after marriage.





# "The Mullenville Mystery"

Julian Hawthorne

(1872)

Between four and five every afternoon, except Sundays, it was the time-honored custom of the Mullenville population to assemble at the post office, and there, under cover of waiting for the mail to be made up, relax themselves with friendly, business, or amorous conversation, as the case might be. The sight of the letters and newspapers popping into the various boxes seemed to assist ideas in popping into heads, and words in popping out. Certainly, at no time were the inhabitants of Mullenville more gay, social, talkative, and good-humored than at evening mail-time; and as for the lovers,—it is awful to think of what their predicament would have been in case the Mullenville post office had not existed. In fact, if the persons who constructed the plans whereby Mullenville was built had been as wise in regard to human nature as to engineering, they would most undoubtedly have placed the post office and the church side by side, and perhaps connected them with a covered passage.

On the 6th of August, 1867,—in matters like this it is well to be precise about the dates,—the usual genial assemblage was buzzing within the post office walls. It is nearly five o'clock; the mail is well-nigh sorted. Hark!—the delivery door is thrown open with a click-clack, and up surge the people like a wave, breaking against the door, and thence flowing off in a lengthened stream to the post office entrance, and so out upon the steps, on which those who emerge first stand to watch the exit of those who come after. Among the former we notice at once the elegant figure of an aristocratic young fellow, with a handsome, enterprising countenance, and easy, confident bearing. Who is he? Why, young Ned Holland, from Cambridge, who has been sent up here to rusticate, having been detected in the execution of some tremendous practical joke upon the faculty. He is a talented, audacious sort of chap, popular among both men and women,—for there is a large amount of pure romance mingled with his composition, and an impetuosity and fertility of thought and action such as girls always like, and men too, unless they happen to be jealous. By the way, Sam Gumble, the town beau, hates Ned Holland

with a deadly hatred, which logically proves him jealous; and, even as we speak, behold the cause!

Sweet, pretty, delicious little Nellie Swansdown is coming rosily out of the post office door, and Sam Gumble, in an immature frock coat and red-and-white check necktie, is stalking beside her, paying her compliments fragrant with the perfume of corned beef, cabbage, and pomade. As they step out into the open air, Sam crooks his elbow and remarks, with a touch of that humor which he has made his own:—

"Now, then! hook on to my handle, Nell!"

It would be hard to say just how it was done. Nothing could have been neater, quicker, more complete. There was a graceful, rapid movement, a stern, decided "Stand aside, sir!" a gentle, caressing "Allow me, Miss Swansdown!"—and there stood Sam, alone, his face contorted with fury, mortification, conscious defeat; and moving away, arm-in-arm, a perfect picture of confiding affection on one side and loving protection on the other, the well-matched figures of Ned Holland and Nellie Swansdown. Nobody could help chuckling and feeling jolly about it: and Sam Gumble got no sympathy at all, either from the girls (for had he not neglected them for Nellie?), or from the boys (for was he not always bragging about the "gals that were sweet on" him?—and all the time it wasn't that they were sweet on him, but that their thrifty fathers and mothers were sweet on his bank account). So everybody looked with complacency on Sam's discomfiture, while the bold and successful young collegian was the favorite of the hour.

It is not necessary to go back and give a reason for all this; it is easy enough to imagine how, during the month of Ned Holland's presence in Mullenville, beauty and valor and prettiness and sweetness had mutually and irresistibly attracted each other, to the abandonment and oblivion of all beside; how, the day before the incident we have witnessed, the loving explanation had taken place, and Sam Gumble's final overthrow been agreed upon. No use going into the particulars of all that; what is to come is matter of even greater moment.

A walk of full three-quarters of a mile lay between the lovers and the vine-covered farmhouse in which Nellie lived. It was an ideal road, always winding, with a lush meadow and a brook on one side and an undulating hill on the other; and the path shaded by enormous elm and butternut trees. Even had it been less picturesque, one would suppose that the sunshine in the

young people's hearts would have supplied any deficiencies. Alas! for the folly of human beings, their own worst enemies! It was on this lovely, solitary road, gilded by the afternoon sun and shadowed by the trees, that these two fortune-favored, prosperous, romantic young idiots got themselves involved in one of those unpardonable sins called lovers' quarrels, brought on by absolutely nothing whatever, and yet maintained and carried through to a fatal termination. Shade of Sam Gumble, rejoice! This is precisely how it happened:—

Ned Holland (*as they turn the corner grocery and strike their homeward road*)— What was poor Sam saying to you when I interfered, Nellie?

Nellie Swansdown (*gathering up her skirts deftly with one hand, and holding unnecessarily fast on to Ned's arm with the other*)— Oh! I don't know; some of his bosh, I suppose. I'm sure *I* didn't listen to him.

N. H. (*smiling self-complacently*)— You used to a good deal, though, before I came.

N. S. (*turning up her nose the least mite*)— What? hear bosh? Oh, well, as for that, I've heard a good deal since, too.

N. H. (*tragically—the hypocrite!*)— Oh! Nellie: you don't believe all I've said to you this last month is bosh, do you?

N. S. (*giving his arm a tiny hug—the dear little thing!*)— Oh! no, Ned; not quite so bad as that! I was only funning.

N. H. (*following up his advantage, the tyrant! and bending over towards her confidentially*)— You do care a little for me; don't you, dear?

N. S. (*looking down, and excessively lovely, and then up, blushing*)— Well! I should think you might know by this—Oh!! Ned—oh! right in the street, and everybody looking! aren't you ashamed?

N. H. (*insolently triumphant at having done it*)— Yes, awfully! there wasn't anybody looking, though, you dear little goose!

(*A pretty long silence, during which they walk along with their eyes on the ground, not only arm-in-arm, but hand-in-hand, and their hearts feeling so tender as almost to hurt.*)

N. H. (*slaying the slain again*)— How did you ever happen to like Sam Gumble, Nellie? What was the fascination?

N. S. (*plaintively*)— Why, Ned! you know there wasn't any. I always detested the creature; but, you know, he's rich, and father's under obligations to old Mr. Gumble, and so he—well, you know how it was.

N. H. (*confidently*)— But he'll be glad to have you marry me, won't he?

N. S. (*hesitatingly*)— Well—father will, of course; but I'm afraid old Mr. Gumble would be angry, and that would make him hard on father, you know. That's all I'm afraid of.

N. H. (*smiling, with superior assurance*)— Oh, my dear, we'll fix it so that old Gumble won't know whom you married, or anything about you. You can rely on me to manage all that.

N. S. (*impulsively*)— You know I always rely on you, dear.

*(It wasn't quite so scandalous this time: they were in the shadow of a big tree, and no one was in sight. But she blushed as rosily as she did the first time, and gave him a box on the ear into the bargain.)*

N. H. (*who has digested what he has had and wants more*)— What is it about me you like most, Nellie?

N. S. (*who thinks she may have given him too much, and desires to set it right*)— Your big nose, I guess! that's what your conceit comes from, isn't it?

N. H. (*whose nose is rather large, and who of course feels sensitive about it*)— I wouldn't make personal remarks, if I were you, dear; it sounds vulgar.

N. S. (*who, being country-bred, is particularly sensitive about vulgarity*)— Much obliged to you for letting me know, I'm sure. I'll try not to shock your taste in future.

N. H. (*with an air of misunderstood virtue*)— It's my feelings, rather than my taste, that you shock, my dear.

N. S. (*with an unreal and satirical laugh*)— Your *feelings*! Indeed! Come, come, Mr. Holland, pray don't waste any of your elegant language on me. You must remember that, whatever else I don't know, I know you!

N. H. (*as if hearing for the first time an interesting and gratifying piece of news*)— Do you, really! I'm very glad you do know something.

N. S. (*coldly, dropping his arm*)— I'm not proud of the knowledge; it doesn't amount to much, and is a bore learning.

N. H. (*politely—very unhappy*)— It's a pity you should waste so much time away from Mr. Sam Gumble.

N. S. (*smiling—perfectly miserable*)— Poor Sam! he's a human creature, at any rate,—not a machine.

N. H. (*furious at this concession to his rival—his voice trembling*)— Do I understand you to say I'm a machine, Miss Swansdown?

N. S. (*bursting into a fit of laughter,—its a wonder it wasn't crying, poor little thing!*)— Why, it isn't possible you don't know that, Mr. Holland? You always reminded me so much of a clock!—stuck up to be looked at; wound up to go, and always doing over the same things,—thinking yourself so clever, so accomplished, so knowing, and everybody else so vulgar, so stupid, so commonplace,—oh! you needn't say anything: one can always tell what a clock is going to say, if one can see its face! But really, now, Mr. Holland, if you only wouldn't pretend to be a man, you might be very interesting—as a machine.

N. H. (*overwhelmed at this unprecedented outburst from his gentle little Nellie Swansdown—the blockhead hasn't sense enough to know that in wounding her pride and self-love he has committed a well-nigh irreparable insult*)— Why! Nellie—what does all this mean? Are you crazy? Nellie, have you forgotten that I'm going away tomorrow?—is this going to be the way we part? You're in a passion, now (*a sensible thing to say, that!*)—wait a minute, and think! Oh! Nellie, you know I love you!

N. S. (*who, though yet very angry, is still more oppressed by dread lest she should give in and cry*)— You love me! I'd as lief be loved by a—cider mill.

N. H. (*losing his temper and, of course, his last chance*)— Very well! for the last time, then, Miss Swansdown,—you won't marry me?

N. S. (*venomously,—catch her marrying any one who calls her Miss Swansdown!*)— I'd rather marry an aw—(*not quite sure of the word*)—awtomotom!

N. H. (*staggering under this last awful thrust, but still game*)— Thank you! Goodbye! I trust your wish may be gratified!!

And so they parted. And there was certainly one thing remarkable about this quarrel,—that the woman did *not* have the last word. Perhaps she expected to have a chance, later; but in that she was mistaken. Ned went tragically home, packed his valise, settled his bills, and took the evening express train to New York, probably hoping there would be a collision before he arrived. Nellie rushed up to her chamber, fully resolved to die before morning. If it had not been that a lingering doubt as to whether her lover might not return the next morning harassed her mind, perhaps she might. But her unwillingness, in case he were not to return, to have her corpse go to the grave unseen and unwept by him, and a reluctance, in case he should happen to come back, to be dead and not know it,—these conflicting emotions kept

her in a state of indecision till morning, and then, of course, there would have been no use or poetry in it. Ned did not come back, and Nellie survived. It may have been pride, it may have been hope, it may have been indifference that buoyed her up,—but who can read a woman's heart? We must first make a new vocabulary.

Something else remains to be recorded ere we arrive at that portion of our tale which may be designated the historical. We would rather say nothing about it; fain modify it—fain account for it. But, no! it *will* be told,—it will not be modified,—it is unaccountable! It is no use talking about money, and obligations, and immitigable elderly people: all the world knows that the day for those things has gone by,—lovers never pay any attention to them now (when they are really in love). The dark fact remains, that Sam Gumble, having satisfied himself of the actual and permanent disappearance of Mr. Ned Holland, took to ogling the deserted young lady again: he called on her evenings, walked home with her afternoons; and Nellie—oh Frailty, thy name still continues to be woman!—Nellie did not repel his advances with disdain. And now for the history.

No one who has resided within a thousand miles of Mullenville, or is among the numberless subscribers to the *Mullenville Harp*, needs to be reminded of the extraordinary event which took place there on the twenty-first day of September, 1867; an event utterly without parallel or precedent in the annals of the town, or, for that matter, of the whole world. But since there are possibly some few who were in Europe, or unborn, on the day in question, a brief synopsis of events will be given for their especial behoof.

About a week before the above date, the Mullenville population awakened one morning to a sense of placards. Placards were posted everywhere—on barns, on board fences, on the white-washed exterior of the hotel stables, and one fiery red fellow on the very door of the church! Every placard bore the announcement, in letters a foot high and under, that a most remarkable curiosity would be exhibited in the Town Hall on the evening of the 21st of September. This was nothing less than an automaton, made to represent a man, life-size, and constructed with such surpassing ingenuity and cunning that it was next to impossible to detect the deception. Indeed, it was asserted—on the authority of a number of testimonials from distinguished people living out West—that many individuals who professed to be well acquainted with mankind, and deeply versed in the arcana of human nature, had, nevertheless, been completely bamboozled by the marvelous accuracy

wherewith the automaton counterfeited humanity. Some had gone so far as to declare that it was not an automaton at all, but the devil! And surely, if half the wonders claimed for it were true, one might well suspect something uncanny in it. Not only could it walk, move its arms, turn and nod its head, roll its eyes, and twiddle its thumbs; but it could talk, sing, whistle, laugh, and, if report were to be trusted, read and write also! There was something awful in the idea of such a thing.

Needless to say the anticipations aroused in the Mullenvillian breast were anxious and great: nothing was talked of day or night, by young or old, but the Automaton. As the appointed day drew near, people gathered together from miles around; the hotel was filled over and over, and half the private residences in town were transformed into boarding houses. The Selectmen hired a gang of carpenters to increase the accommodations of the Town Hall, and swore in a number of special policemen to keep the crowd in order.

On the 20th of September, the day before the exhibition, Sam Gumble went up to make an evening call on Nellie Swansdown. He was rigged out in a very chaste visiting costume: a wide-awake felt hat shaded his ruddy and oleaginous countenance from the warm starlight; a dress coat, built by the town tailor, covered his broad back, and a pair of trousers of blue army-cloth brought his legs into becoming relief. He wore pumps over his knit yarn socks, and carried in his lemon-colored kid hand a delicate ivory-headed cane.

Of course the first subject introduced was the Automaton. Nellie, to be sure, was very quiet, and hardly opened her mouth once to say anything about it. But Sam was so eloquent in his descriptions and eulogiums that one would have supposed it to have been his brother at least. Unmindful of Nellie's pale face and occasional shudderings, he dilated on its life-like attributes and mysterious deeds with all the richness of fancy and sweetness of voice for which he was noted; and ended by producing two tickets, entitling the holders to the best seats in the house, so close to the stage that, to use Sam's figure, they could see the machine's eyelashes, if it had any. One of these he besought Nellie to accept, with the understanding that he was to call for and escort her to the hall the next night.

For some time Nellie hesitated. She seemed strangely unwilling to put herself within the range, so to speak, of this mysterious Automaton. Her reluctance, indeed, almost amounted to a superstitious dread. There was a sad and distant expression in her eyes, as though the sound of some loved and

lost voice were echoing in her ears. Finally, however, her resistance was overcome, or perhaps she looked at the matter in a new light. At any rate, she consented to go with Sam to the exhibition, and he departed with an exulting heart,—as well he might, with the prospect of having sweet Nellie Swansdown all to himself for a whole evening. As for Nellie, she went to bed and had an awful nightmare, in which it seemed to her that she was married to the Automaton, and that after the ceremony was over it turned into the tall old-fashioned clock which stood in the dining room; and while she was standing looking up at it in dismay at the thought of being united to such a thing, and bound to honor, love, and obey it all her life, it fell over on to her and crushed her to pieces; upon which, of course, she screamed and woke,—but the terror of the dream lasted her all day.

Evening had come. An expectant crowd at the depot had witnessed the arrival of the train containing the wonderful Automaton. It had come in with a long-drawn shriek, as of a soul in despair, and had slipped away again with an infernal cachinnation, as though some devilish joke were in the wind. Meanwhile, under the direction of the manager (a gentleman with black hair falling over his shoulders, and a heavy black beard), a huge box, resembling in form a cross between a coffin and a safe, was carefully lifted down from the baggage car and transported slowly and cautiously to the express cart. In this box, it was whispered, was concealed the marvelous mechanism of the Automaton. The sensation created was profound, and apparently not unmixed with fear. Men gathered in little knots and groups, whispering apprehensively to one another, and casting strange glances ever and anon over their shoulders into dark corners of the depot, unilluminated by the red light of lanterns and gas lamps. But when the rattle of the express cart began to die away in the distance, a fresher air seemed to blow around, the whispers rose and loudened into voices; some of the bolder spirits went so far as to laugh and crack appalling jokes, almost scaring themselves, as well as the more timid ones, by the exuberance of their own audacity.

It was eight o'clock. Every seat was filled, and all the standing-room was taken up; the very staircase and the outside flight of steps were packed, and vast multitudes surrounded the building on every side. Countless small boys had climbed the trees which happened to grow within a hundred yards of the windows, and strove manfully to imagine they could see what was going on between the chinks of the closed blinds. Within, a black curtain was stretched across the stage, which was raised some five feet above the floor of



the hall. Close in front, by way of orchestra, sat David Clank, the town jailer, who played the violin at all the sociables in Mullenville; on this evening he was likewise engaged to touch the spring which was to raise the curtain. Directly behind him, the next nearest to the scene of operations, were Sam Gumble and Nellie Swansdown,—the former talkative, smiling, and redolent; the latter pale, silent, and nervous.

A bell sounded. The gentlemanly manager stepped before the curtain and made his bow to the assembly. He stroked his beard, passed his fingers through his long hair, and said he was proud to meet them; that this was the first audience before which the Automaton had been exhibited in this part of the country; that Mullenville, in that respect if not in others, was preferred before either Boston or New York; that in regard to the exhibition he would only say that the expectations aroused by the bills would, he was sure, be more than satisfied. He said the Automaton was certain to outdo itself in the presence of so much youth and beauty as were assembled in that hall that night; and as he spoke his eye fell on the upturned and bewildered face of Nellie Swansdown. He smiled, bowed again, stroked his beard, and vanished. An interval elapsed—a few said a minute; others, five minutes; some fifteen. However, the bell sounded again at last, David Clank touched the spring, the curtain rolled out of sight as if by magic, and there was revealed, standing in the center of the stage, a large box in shape something between a coffin and a safe. Amidst a deathlike stillness the door of this box flew open, and out stepped, with an air of jaunty assurance, with flaxen hair and whiskers, a nobby suit of clothes, an eyeglass, a cane, and patent leather boots—out stepped, with a bow and a smirk, just as any human being might have done, only with infinitely more grace and ease—out stepped the miraculous, the mysterious, the supernatural, the incomparable Automaton! The entire audience, having held their breath for a half-hour with out stopping, now let it out again in a prolonged and mighty "Ah-h-h-h!" The suspense of many long days and sleepless nights was brought to an end, and the greatest wonder of the world was at length before their eyes.

It was all true—nay, the half had not been said! That Automaton did beat all nature, as Sam Gumble remarked *sotto voce* to Nellie Swansdown. It seemed absolutely to be endowed with human intelligence; indeed, the opinion was expressed that no human intelligence could equal it. Why, it ogled the girls! it cracked jokes with the men!! it danced a hornpipe, and whistled "Hail Columbia" and "Yankee Doodle"!!! It put its hands into its

pockets, and sang and acted "Walking down Broadway"—the first time the song had ever been produced upon that stage! The audience became excited—then wild—then frantic! Their enthusiasm amounted to madness, yet seemed wholly inadequate to the magnitude of the occasion. The Automaton was not an Automaton at all—it was a demi-god!

And how did the demi-god impress Nellie Swansdown? When it first stepped out of the box and came forward to the footlights, she almost started from her seat and could scarcely repress a scream. Then she partly recovered herself with a little laugh, and looking around to see if any one had observed her. Then she turned her eyes once more to the Automaton, and as she looked her gaze grew every moment more and more intense and absorbed, until it seemed as though she were living only in her eyes. An expression of incredulity deepened into wonder, that into amazement, that into mystification, that into apprehension. Her sweet lips were parted, and her breath came only by fits and starts. During the whole time the Automaton was on the stage she did not speak one word. Certainly no one was more impressed with that evening's entertainment than was Nellie Swansdown.

At last the end came. The Automaton, in a few well-chosen words, took leave of the audience, and expressed the hope of meeting them all again—if not all, at least some. They said afterwards that there was a peculiar twinkle in its eye as it made that remark. It retired up the stage, bowing to the right and left. When it reached the door of the box, and just before disappearing through it, it took a nosegay from its buttonhole and tossed it towards the audience. A hundred hands were outstretched to grasp it, but it fell right into Nellie Swansdown's bosom, and stayed there. The Automaton nodded and smiled at her, vanished into his box, the curtain fell, and the exhibition was at an end. A sudden stillness and awe came over the audience, now that their crazy excitement was past. Silently they left their seats and hurried to get out of the hall before the gas should be turned off. The multitude outside, who had crowded to the entrance, curious to see the faces of those who had seen the Automaton, shrank back alarmed at their ghastly appearance. Every one hastened homeward as fast as his legs would take him, and in an incredibly short space of time there was not a soul left in the streets.

Among the last to leave the hall were Sam Gumble and Nellie Swansdown. A melancholy interest attaches to this last appearance of theirs together in the world. They were seen to walk off in the direction of home, until, having got beyond the range of the gas lamp which burned dimly over

the iron gate of the City Hall, they were swallowed up in the darkness. It was a warm, cloudy night, and drops of rain fell intermittently, like blood drops from a fatal wound. Nellie Swansdown, the pretty, the sweet, the lovable, was never seen again. As for Sam Gumble, he was picked up the next day, but in a state of hopeless idiocy. He maundered about a phantom carriage with jet-black horses, which came thundering along the road after he and Nellie had got a hundred yards or so from the Town Hall; said that out of this carriage had sprung a goblin which, from its figure and height, he recognized at once as the Automaton, though the flaxen hair and whiskers were gone; that this goblin had prostrated him by a left-handed blow in the eye, had seized Nellie round the waist,—she, from terror or some other cause, being unable even to scream,—had leaped with her into the phantom coach, and had disappeared into the night with a rumble like an earthquake. This was Sam's story, gathered from time to time out of his mutterings and ravings. The good people of Mullenville knew not whether to believe it or not, but they at once decided that Sam ought to be confined in the town asylum, and the decision was forthwith carried into execution, and Sam occupies rooms there to this day.

There was one peculiar thing about it—nobody ever again saw or heard anything of the Automaton, or of its black-bearded and gentlemanly manager. No trace was left behind save the mysterious box, which remained standing on the stage behind the black curtain. A committee was appointed and organized to sit upon this box; this, not without many misgivings, they did, and decided that it ought to be opened. The bravest man in Mullenville was appointed to perform this office; he armed himself with a couple of revolvers and a prayer book, and actually accomplished the feat; when there appeared, to reward the labors of the committee, a long black wig with a beard to match, and a flaxen ditto, with accompanying whiskers. These were locked up in the Court House, and then the committee, having published the result of their researches, adjourned *sine die*.

In process of time, as people's minds began to cool, the fame of the Automaton would seem gradually to have fallen into disrepute. It was declared that the thing wasn't so wonderful after all; that it had not, as a matter of fact, done half the things accredited to it; that its motions had not only been limited in scope, but stiff and mechanical in manner; that a whirring sound, as of a clock running down, accompanied every movement. Its voice, it was maintained, had been nothing but a croak and a squeak; that

it hadn't sung or whistled at all, and as for the reading and writing, that was all humbug.

Nevertheless, there have been, and still are, certain pig-headed people who persist in asserting that there was something more in that Automaton than ever was made known to the public at large. They hint that Nellie Swansdown was actually forced to elope with this mechanical goblin, as a judgment upon her for having, in a fit of anger with an admirer of hers, declared she would rather marry an automaton than him. They even pretended to have heard the rattle of carriage wheels on that eventful September night; and in regard to the nosegay, they declare it had a note tied to it, which Nellie read, and which told her more than she would have been inclined to admit; and there is much more nonsense of the kind which might be quoted, were it worth while.

It is pleasant to be able to record the amicable relations existing between the houses of Gumble and Swansdown, even though the marriage between the younger branches was never consummated. Their sorrows, probably, have united them.

# "In Love With an Automaton"

Unknown

(1878)

Everybody has heard of that famous automaton, the "Chess-player of Kempelin," by means of which the little Russian officer escaped from his enemies, and beat them at chess at the same time. At any rate, Mr. Oliver Conway had heard of it; and, naturally thinking that what a benighted foreigner could do, a free and enlightened American citizen ought to do as well or better, he set to work on a chess-playing automaton that was intended to portray "the father of his country" engrossed in the noble game.

After two years of patient experimenting, the inventor's hopes were crowned with complete success.

At once the wonderful automaton, George Washington, began his travels, appearing successively in all the great cities of the Union, and receiving the most patriotic welcome everywhere.

Indeed, George, as his friends affectionately termed him, performed his part in a way to do honor to his name; winning, as a rule, and losing, when he did lose, with true Washingtonian dignity.

Of course the first question with every visitor was, who furnished George with the needful brains? All who chose were invited to examine the figure and the chest of drawers upon which it leaned; but the peering, poking, thumping that ensued, led to no discovery.

On a certain December morning, the *Gazette*, *Commercial Inquirer*, *Times*, etc, announced to the dwellers of a certain Western city that the well-known chess-playing automaton, George Washington, was now on exhibition at No. 54 Race Street. Doors open from one to five, P. M. Admission 10 cents. Games 25 cents.

Everybody who took an interest in chess resolved to go to No. 54, and quite a number went. Among others, went Mr. Francis Pinkerton, an ardent lover of the game.

The exhibition proved entirely satisfactory—tho automatic George winning all the games but one, and so stoutly contesting that one, that the victor, young Pinkerton, resolved to come next day. In point of fact, he not

only came next day, but every day for two weeks.

The best time for play, he soon discovered, was the first hour of the exhibition, when, as a rule, but few persons were present. Indeed, he was often left entirely alone with the automaton; when even the exhibitor, after winding up the machine, withdrew to chat with the doorkeeper in the outer passage.

By degrees, what may be called a chess friendship grew up between the man and the machine. The two were very equally matched, and the games were often warmly contested.

After an unlucky move, or the defeat of some deep-laid scheme, Pinkerton would look up with an involuntary grimace, almost expecting to see the rather blank features of his opponent expand into a smile of triumph. But the Father of his Country stared solemnly at the wall opposite, and gave no sign.

But one day, when a severe snowstorm kept other visitors away, and Mr. Conway had gone out in quest of a cigar, Pinkerton and his silent opponent were engaged in a game that had been suiting from the start, and at last reached one of those dead-locks in which a move may mean victory or defeat.

It was Pinkerton's move; and, after a deliberate survey of the field, he made a move which he regarded as decisive, but which, by an unparalleled oversight, left his queen exposed. His chagrin at this puerile blunder may be imagined. He looked up, confident that even an automaton must be hugely amused; and on meeting the usual blankly benevolent stare, he was provoked into the indecorum of shaking his fist at the unresponsive image.

George did not relax a jot of his wonted dignity. There was no twinkle of the eye, no twitching of the lips, to indicate merriment; yet out of the broad chest came a ripple of half-suppressed, musical laughter, as of a person who had forgotten the impropriety of mirth till too late to control it.

Frank Pinkerton sprang to his feet in utter amazement. It was a young girl's laugh; there was no mistaking the irrepressible, fun-loving intonation. And when the laughter had ceased, as it quickly did, it was a young girl's voice, of almost childlike sweetness, that begun, in rueful, pleading tones:

"Oh, what have I done! Do, pray, promise me, sir, you will not tell. We shall be ruined, else. I forget where I was; you looked so droll, I could not help laughing. But please promise not to tell any one, not even my father. Quick! I hear him coming now."

"I promise with all my heart, but—"

The door opened to Mr. Conway and a visitor before the young man could finish his sentence; and, it being two o'clock, he was obliged to go at once to the bank, in which he held the position of assistant cashier.

For a whole week thereafter, though he went every day to the Race Street rooms, Pinkerton was never left alone with the automaton for an instant. There was, therefore, no opportunity to open communication with the mysterious tenant of the figure.

Meanwhile, his imagination was by no means idle. What young man with an unfettered heart in his bosom could have sat opposite an invisible female, known to possess a sweet voice, a musical laugh and a good brain for chess, and yet felt no romantic stirrings in his blood?

That cunning elf, imagination, was ready with charming forms and faces to suit the dulcet tones of the voice. Ladies in Venetian masks or black dominos have always exerted a remarkable fascination over mankind, as witness the novels of all nations. But a sweet-voiced lady inspiring an automaton—what a field for romantic speculation!

In short, thanks to a lively fancy, within a week our hero found himself positively in love with a lady he had never seen.

He fell into the habit of strolling down Race Street about the time the day's performance came to an end, scrutinizing with flattering attention all the women who issued from that particular block.

But the whole upper part of the building seemed given over to various sorts of feminine industry, so that women, buyers and workers alike, were continually coming and going. Amid such a crowd, it was not easy to recognize a lady one had never seen.

Pinkerton hazarded several guesses, however. He was particularly struck, for example, with a daintily poised figure, distractingly muffled up in wraps, whom he never saw leave the building, but twice saw enter it shortly before 1 p.m.

He could not, of course, rush across the street and follow the figure upstairs, as we shall do, to the second floor, and into a room two doors beyond that in which the automaton was exhibited.

Mr. Conway stood in the middle of this room and greeted the figure's entrance with:

"You are a little late today, Ollie."

"Yes; I waited to avoid some one who was watching me, I thought."

And the young lady hit her lip to keep back the blush and half-smile that would come.

"That's right, my dear; be very cautious. A discovery would ruin us. But it is time you were dressing. I will get the machine ready directly."

Mr. Conway hustled away through an intervening room, leaving his daughter to make certain needful changes in her apparel.

When she presently appeared before her father, who, after carefully locking the outer door, had mysteriously cleft the imposing frame of George Washington in twain, Ollie was arranged to suit the economic requirements of the automaton, which abhorred the redundancy of skirts and other draperies.

My clumsy masculine vocabulary could not do justice to the resulting toilet; suffice it to say that, from tiny slipper to the mass of dark tresses unconfined that fell in prodigal luxuriance over the close-fitting jacket, Miss Ollie looked just the model, both in form and costume, for an ideal divinity of uncertain sex.

Unluckily, there was no one to appreciate the effect. A man's daughter being merely his daughter in any garb, Mr. Conway looked upon the outfit from a business point of view solely.

"Come!" he said, consulting his watch. "It's ten minutes after one."

Ollie took her place in the comfortably padded interior of George Washington, and his movable half was swung round and locked. Putting the key in his pocket, the father started for the outer door, but stopped halfway to say, a little anxiously:

"You don't think that young fellow who comes every day suspects anything, do you?"

The faint "Oh, no!" in reply did not seem altogether reassuring; for, as he threw open the door to the public, the exhibitor muttered:

"If he hasn't any other game in his eye, he must be chess-crazy."

As usual, Pinkerton was the first person to enter; and he presently had the good fortune to be left alone with the automaton for a few moments.

The game was at a crisis; but no sooner had the door closed behind Mr. Conway and a departing visitor than the supposed chess-lunatic began, in a low, hurried voice, directing an imploring gaze upon the impassive visage before him:

"I have kept your secret inviolate; may I not ask a favor in return? Will you not allow me the pleasure of becoming better acquainted with one who



has given me so many pleasant hours to be grateful for?"

Ollie felt sure, from the respectful tone of the request that no ungenerous motive had prompted it; but a not unnatural reserve made her shrink from meeting anywhere else one who knew the secret of her vocation.

There was a long pause before the same musical voice that had formerly thrilled the young man made answer.

"Please do not ask anything but my gratitude, which you have manfully deserved. Could I even give my own consent to what you ask, my father would then have to know all, and he would be very much displeased with my imprudence."

Pinkerton was rather nettled at the evident reluctance of his mysterious *vis-à-vis* to a further acquaintance. Had he been better acquainted with the devious policy of an enigmatical sex, he might have complacently hugged himself instead; for an unwanted timidity is a sure sign of a woman's interest. Yet he would have pressed his claim still further, no doubt—possibly to a successful termination, for they are soft-hearted, obliging creatures, all of them—had not the entrance of an inopportune visitor cut short the colloquy. The rest of that game was wretchedly played.

Next day, Pinkerton did not come at one o'clock, as usual. Whether his absence was remarked or not, the placid visage of George Washington gave no sign. To be sure, he was a little absent-minded, losing two games to an unskilled opponent.

When two o'clock of the next day came, however, without bringing the usual visitor, George showed signs of an unheroic impatience, rapping sharply on the board to quicken the movements of tardy opponents, and dashing into hazardous positions with unexampled recklessness.

At four the delinquent put in an appearance; but not alone. A fashionably dressed, rather handsome young lady accompanied him. At his solicitation she took her place at the board, and he not only watched her play with great apparent sympathy, but assisted her, now and then, with timely suggestions.

"He has told her," thought Ollie.

Her eyes flashed, and she summoned up all her energies for a supreme effort.

Without the gentleman's assistance the lady would have been no match for her; as it was, Ollie splendidly vanquished both of them. They went away, he complimenting her on the skill she had not shown.

A rough-looking countryman next stepped forward for a game; but the automaton refused to move. Mr. Conway hustled up, pretended to examine something, announced the machinery out of order, and the exhibition closed for the day.

"What was the matter, my dear," he said, anxiously, as his daughter stepped forth from her concealment with white, weary face.

"I was tired."

"Well, well," he said, apologetically, "we've only three days more to stay here, and then we'll take a vacation." Ollie looked relieved at the prospect of getting away so soon, and went to exchange her unique garb for the ordinary street costume.

The third day after this was announced as the last of the automaton exhibition. An unusual number of persons were therefore present on the opening of the doors—so many, in fact, that Frank Pinkerton, who had resumed his regular attendance, experienced some difficulty in getting the board for a last game. All his attempts to fathom the mystery had failed, and he despaired of ever knowing more of the tantalizing unknown who was so near and yet so far off.

The game was languidly conducted on both sides. Perhaps each player was more occupied with the other than either dreamed. But in one respect, at least, that game was remarkable—it never came to an end.

The room was heated by a coal stove that had been for some time depending for support upon three legs. A large man, setting his foot upon its decrepit side with some emphasis, gave it a start that resulted, first, in the loss of a second leg, and, finally, in the toppling over of the whole thing, bursting off the top, and scattering the fiery contents in every direction.

With that unlimited confidence' the fire department common to us all, everybody in the room ran out to give the alarm. Mr. Conway had before gone out to get change, and no one thought of the automaton but Pinkerton.

Instead of following the general rush, he sprang to the side of the figure, crying: "How can I help you?"

The room was fast filling with suffocating vapor. A half-stifled voice answered:

"The key! My father!"

The key was not to be had—the automaton was immovable. Pinkerton seized hold of an arm, and wrenched it off from the shoulder, and, inserting both hands into the gap thus made, he, by a single vigorous effort, literally

halved the figure.

Through the stifling cloud of bituminous smoke, he scarcely perceived what manner of being it was. He caught it up in his arms, and bore it through the passage and down the stairs. The street safely gained, he became dimly conscious of a very pretty boy, whose long, silky hair massed itself on his, Pinkerton's, shoulder. He felt, however, none of the disgust that the sight of a long-haired youth rarely fails to awaken in every well-regulated masculine mind.

Indeed, to use a mild phrase, he protected that boy unnecessarily, not permitting him to touch the ground for an instant. Though so far from being unconscious, the boy kept continually reiterating: "Do call a carriage! Pray, take me to a carriage!"

The omnipresent hackman soon appeared, and whisked away the pair before even the *Times* reporter, who was on the ground, had learned the boy's name and occupation.

Number 54 Race Street was saved, though the fragments of George Washington were found blazing. Mr. Conway was inconsolable for a while; but what man has done man can do, and a year after a new and portlier George Washington was delighting the chess-loving citizens of New Orleans by his performances. The world renowned chess-player, Paul Morphy, granted him the honor of two defeats, and graciously allowed that, for a wooden man, he played very well.

Ollie heard, with interest, of these proceedings through the columns of the *Picayune*, copies of which her father sent.

She has given up chess-playing for housekeeping, has exchanged the society of kings, knights and bishops for the society of a single plebeian bank clerk; in short, she has become the wife of Mr. Francis Pinkerton.

What need to detail the steps by which this happy consummation was reached? The rescue of a young Lady with whom he is already more than half in love rarely fails to finish a man of average sensibility; and as for the young lady, her attitude admits of no alternative.

And so they were married, and the automaton mystery remained unsolved, for nobody but our friend Frank ever got at "the bottom facts," and he has none of a certain celebrated namesake's appetite for making statements.

# More Human than Human

"The Ablest Man in the World"

"The Artificial Man: A Semi-Scientific Story"

For the remainder of the 19th century and into the beginning of the 20th, fiction surrounding automata ping-ponged from grim to light-hearted. The two stories in this section are the former.

Edward Page Mitchell (1852–1927) was one of the most innovative early science fiction authors. Editor for *The Sun* and a skeptic, Mitchell often followed his science fiction narratives to their logical conclusions. When Dr. Fisher, the protagonist of "The Ablest Man in the World," is confronted with the possibility of a new Napoleon in the form of an ultra-competent cyborg, he takes the only action he finds available to him. The story was originally published in *The Sun* and was later widely anthologized.

No less dire is "The Artificial Man" by Don Quichotte, an obvious pseudonym. In narrative length, the story lies on the other end of the spectrum from Mitchell's "Ablest Man." While little more than a vignette, it does not lack for ominous atmosphere. It was published in *The Argonaut* in 1884.



# "The Ablest Man in the World"

Edward Page Mitchell  
(1879)

## I.

It may or may not be remembered that in 1878 General Ignatieff spent several weeks of July at the Badischer Hof in Baden. The public journals gave out that he visited the watering-place for the benefit of his health, said to be much broken by protracted anxiety and responsibility in the service of the Czar. But everybody knew that Ignatieff was just then out of favor at St. Petersburg, and that his absence from the centres of active statecraft at a time when the peace of Europe fluttered like a shuttlecock in the air, between Salisbury and Shouvaloff, was nothing more or less than politely disguised exile.

I am indebted for the following facts to my friend Fisher, of New York, who arrived at Baden on the day after Ignatieff, and was duly announced in the official list of strangers as "Herr Doctor Professor Fischer, mit Frau Gattin und Bed. Nordamerika."

The scarcity of titles among the travelling aristocracy of North America is a standing grievance with the ingenious person who compiles the official list. Professional pride and the instincts of hospitality alike impel him to supply the lack whenever he can. He distributes Governor, Major-General, and Doctor Professor with tolerable impartiality, according as the arriving Americans wear a distinguished, a martial, or a studious air. Fisher owed his title to his spectacles.

It was still early in the season. The theatre had not yet opened. The hotels were hardly half full, the concerts in the kiosk at the Conversationshaus were heard by scattering audiences, and the shopkeepers of the Bazaar had no better business than to spend their time in bewailing the degeneracy of Baden Baden since an end was put to the play. Few excursionists disturbed the meditations of the shrivelled old custodian of the tower on the Mercuriusberg. Fisher found the place very stupid—as stupid as Saratoga in June or Long Branch in September. He was impatient to get to

Switzerland, but his wife had contracted a *table d'hôte* intimacy with a Polish countess, and she positively refused to take any step that would sever so advantageous a connection.

One afternoon Fisher was standing on one of the little bridges that span the gutterwide Oosbach, idly gazing into the water and wondering; whether a good sized Rangely trout could swim the stream without personal inconvenience, when the porter of the Badischer Hof came to him on the run.

"Herr Doctor Professor!" cried the porter, touching his cap. "I pray you pardon, but the highborn the Baron Savitch out of Moscow, of the General Ignatieff's suite, suffers himself in a terrible fit, and appears to die."

In vain Fisher assured the porter that it was a mistake to consider him a medical expert; that he professed no science save that of draw poker; that if a false impression prevailed in the hotel it was through a blunder for which he was in no way responsible; and that, much as he regretted the unfortunate condition of the highborn the Baron out of Moscow, he did not feel that his presence in the chamber of sickness would be of the slightest benefit. It was impossible to eradicate the idea that possessed the porter's mind. Finding himself fairly dragged toward the hotel, Fisher at length concluded to make a virtue of necessity and to render his explanations to the Baron's friends.

The Russian's apartments were upon the second floor, not far from those occupied by Fisher. A French valet, almost beside himself with terror, came hurrying out of the room to meet the porter and the Doctor Professor. Fisher again attempted to explain, but to no purpose. The valet also had explanations to make, and the superior fluency of his French enabled him to monopolize the conversation. No, there was nobody there—nobody but himself, the faithful Auguste of the Baron. His Excellency, the General Ignatieff, his Highness, the Prince Koloff, Dr. Rapperschwyll, all the suite, all the world, had driven out that morning to Gernsbach. The Baron, meanwhile, had been seized by an effraying malady, and he, Auguste, was desolate with apprehension. He entreated Monsieur to lose no time in parley, but to hasten to the bedside of the Baron, who was already in the agonies of dissolution.

Fisher followed Auguste into the inner room. The Baron, in his boots, lay upon the bed, his body bent almost double by the unrelenting gripe of a distressful pain. His teeth were tightly clenched, and the rigid muscles around the mouth distorted the natural expression of his face. Every few seconds a prolonged groan escaped him. His fine eyes rolled piteously. Anon, he would press both hands upon his abdomen and shiver in every limb in the intensity

of his suffering.

Fisher forgot his explanations. Had he been a Doctor Professor in fact, he could not have watched the symptoms of the Baron's malady with greater interest.

"Can Monsieur preserve him?" whispered the terrified Auguste.

"Perhaps," said Monsieur, dryly.

Fisher scribbled a note to his wife on the back of a card and dispatched it in the care of the hotel porter. That functionary returned with great promptness, bringing a black bottle and a glass. The bottle had come in Fisher's trunk to Baden all the way from Liverpool, had crossed the sea to Liverpool from New York, and had journeyed to New York direct from Bourbon County, Kentucky. Fisher seized it eagerly but reverently, and held it up against the light. There were still three inches or three inches and a half in the bottom. He uttered a grunt of pleasure.

"There is some hope of saving the Baron," he remarked to Auguste.

Fully one-half of the precious liquid was poured into the glass and administered without delay to the groaning, writhing patient. In a few minutes Fisher had the satisfaction of seeing the Baron sit up in bed. The muscles around his mouth relaxed, and the agonized expression was superseded by a look of placid contentment.

Fisher now had an opportunity to observe the personal characteristics of the Russian Baron. He was a young man of about, thirty-five, with exceedingly handsome and clear-cut features, but a peculiar head. The peculiarity of his head was that it seemed to be perfectly round on top—that is, its diameter from ear to ear appeared quite equal to its anterior and posterior diameter. The curious effect of this unusual conformation was rendered more striking by the absence of all hair. There was nothing on the Baron's head but a tightly fitting skull cap of black silk. A very deceptive wig hung upon one of the bed posts.

Being sufficiently recovered to recognize the presence of a stranger, Savitch made a courteous bow.

"How do you find yourself now?" inquired Fisher, in bad French.

"Very much better, thanks to Monsieur," replied the Baron, in excellent English, spoken in a charming voice. "Very much better, though I feel a certain dizziness here." And he pressed his hand to his forehead.

The valet withdrew at a sign from his master, and was followed by the porter. Fisher advanced to the bedside and took the Baron's wrist. Even his

unpractised touch told him that the pulse was alarmingly high. He was much puzzled, and not a little uneasy at the turn which the affair had taken. "Have I got myself and the Russian into an infernal scrape?" he thought. "But no—he's well out of his teens, and half a tumbler of such whiskey as that ought not to go to a baby's head."

Nevertheless, the new symptoms developed themselves with a rapidity and poignancy that made Fisher feel uncommonly anxious. Savitch's face became as white as marble—its paleness rendered startling by the sharp contrast of the black skull cap. His form reeled as he sat on the bed, and he clasped his head convulsively with both hands, as if in terror lest it burst.

"I had better call your valet," said Fisher, nervously.

"No, no!" gasped the Baron. "You are a medical man, and I shall have to trust you. There is something—wrong—here." With a spasmodic gesture he vaguely indicated the top of his head.

"But I am not—" stammered Fisher.

"No words!" exclaimed the Russian, imperiously. "Act at once—there must be no delay. Unscrew the top of my head!"

Savitch tore off his skull cap and flung it aside. Fisher has no words to describe the bewilderment with which he beheld the actual fabric of the Baron's cranium. The skull cap had concealed the fact that the entire top of Savitch's head was a dome of polished silver.

"Unscrew it!" said Savitch again.

Fisher reluctantly placed both hands upon the silver skull and exerted a gentle pressure toward the left. The top yielded, turning easily and truly in its threads.

"Faster!" said the Baron, faintly. "I tell you no time must be lost." Then he swooned.

At this instant there was a sound of voices in the outer room, and the door leading into the Baron's bed chamber was violently flung open and as violently closed. The new comer was a short, spare man of middle age, with a keen visage and piercing, deep-set little gray eyes. He stood for a few seconds scrutinizing Fisher with a sharp, almost fiercely jealous regard.

The Baron recovered his consciousness and opened his eyes.

"Dr. Rapperschwyll!" he exclaimed.

Dr. Rapperschwyll, with a few rapid strides approached the bed and confronted Fisher and Fisher's patient. "What is all this?" he angrily demanded.



Without waiting for a reply he laid his hand rudely upon Fisher's arm and pulled him away from the Baron. Fisher, more and more astonished, made no resistance, but suffered himself to be led, or pushed, toward the door. Dr. Rapperschwyll opened the door wide enough to give the American exit, and then closed it with a vicious slam. A quick click informed Fisher that the key had been turned in the lock.

## II.

The next morning Fisher met Savitch coming from the Trinkhalle. The Baron bowed with cold politeness and passed on. Later in the day a *valet de place* handed to Fisher a small parcel, with the message: "Dr. Rapperschwyll supposes that this will be sufficient." The parcel contained two gold pieces of twenty marks.

Fisher gritted his teeth. "He shall have back his forty marks," he muttered to himself, "but I will have his confounded secret in return."

Then Fisher discovered that even a Polish countess has her uses in the social economy.

Mrs. Fisher's *table d'hôte* friend was amiability itself, when approached by Fisher (through Fisher's wife) on the subject of the Baron Savitch of Moscow. Know anything about the Baron Savitch? Of course she did, and about everybody else worth knowing in Europe. Would she kindly communicate her knowledge? Of course she would, and be enchanted to gratify in the slightest degree the charming curiosity of her Americaine. It was quite refreshing for a *blasé* old woman, who had long since ceased to feel much interest in contemporary men, women, things and events, to encounter one so recently from the boundless prairies of the new world as to cherish a piquant inquisitiveness about the affairs of the grand monde. Ah! yes, she would very willingly communicate the history of the Baron Savitch of Moscow, if that would amuse her dear Americaine.

The Polish countess abundantly redeemed her promise, throwing in for good measure many choice bits of gossip and scandalous anecdotes about the Russian nobility, which are not relevant to the present narrative. Her story, as summarized by Fisher, was this:

The Baron Savitch was not of an old creation. There was a mystery about his origin that had never been satisfactorily solved in St. Petersburg or in Moscow. It was said by some that he was a foundling from the

Vospitatelnoi Dom. Others believed him to be the unacknowledged son of a certain illustrious personage nearly related to the House of Romanoff. The latter theory was the more probable, since it accounted in a measure for the unexampled success of his career from the day that he was graduated at the University of Dorpat.

Rapid and brilliant beyond precedent this career had been. He entered the diplomatic service of the Czar, and for several years was attached to the legations at Vienna, London, and Paris. Created a Baron before his twenty-fifth birthday for the wonderful ability displayed in the conduct of negotiations of supreme importance and delicacy with the House of Hapsburg, he became a pet of Gortchakoff's, and was given every opportunity for the exercise of his genius in diplomacy. It was even said in well-informed circles at St. Petersburg that the guiding mind which directed Russia's course throughout the entire Eastern complication, which planned the campaign on the Danube, effected the combinations that gave victory to the Czar's soldiers, and which meanwhile held Austria aloof, neutralized the immense power of Germany, and exasperated England only to the point where wrath expends itself in harmless threats, was the brain of the young Baron Savitch. It was certain that he had been with Ignatieff at Constantinople when the trouble was first fomented, with Shouvaloff in England at the time of the secret conference agreement, with the Grand Duke Nicholas at Adrianople when the protocol of an armistice was signed, and would soon be in Berlin behind the scenes of the Congress, where it was expected that he would outwit the statesmen of all Europe, and play with Bismarck and Disraeli as a strong man plays with two kicking babies.

But the countess had concerned herself very little with this handsome young man's achievements in politics. She had been more particularly interested in his social career. His success in that field had been not less remarkable. Although no one knew with positive certainty his father's name, he had conquered an absolute supremacy in the most exclusive circles surrounding the imperial court. His influence with the Czar himself was supposed to be unbounded. Birth apart, he was considered the best *parti* in Russia. From poverty and by the sheer force of intellect he had won for himself a colossal fortune. Report gave him forty million roubles, and doubtless report did not exceed the fact. Every speculative enterprise which he undertook, and they were many and various, was carried to sure success by the same qualities of cool, unerring judgment, far-reaching sagacity, and

apparently superhuman power of organizing, combining, and controlling, which had made him in politics the phenomenon of the age.

About Dr. Rapperschwyll? Yes, the countess knew him by reputation and by sight. He was the medical man in constant attendance upon the Baron Savitch, whose high-strung mental organization rendered him susceptible to sudden and alarming attacks of illness. Dr. Rapperschwyll was a Swiss—had originally been a watchmaker or artisan of some kind, she had heard. For the rest, he was a commonplace little old man, devoted to his profession and to the Baron, and evidently devoid of ambition, since he wholly neglected to turn the opportunities of his position and connections to the advancement of his personal fortunes.

Fortified with this information, Fisher felt better prepared to grapple with Rapperschwyll for the possession of the secret. For five days he lay in wait for the Swiss physician. On the sixth day the desired opportunity unexpectedly presented itself.

Halfway up the Mercuriusberg, late in the afternoon, he encountered the custodian of the ruined tower, coming down. "No, the tower was not closed. A gentleman was up there, making observations of the country, and he, the custodian, would be back in an hour or two." So Fisher kept on his way.

The upper part of this tower is in a dilapidated condition. The lack of a stairway to the summit is supplied by a temporary wooden ladder. Fisher's head and shoulders were hardly through the trap that opens to the platform, before he discovered that the man already there was the man whom he sought. Dr. Rapperschwyll was studying the topography of the Black Forest through a pair of field glasses.

Fisher announced his arrival by an opportune stumble and a noisy effort to recover himself, at the same instant aiming a stealthy kick at the topmost round of the ladder, and scrambling ostentatiously over the edge of the trap. The ladder went down thirty or forty feet with a racket, clattering and banging against the walls of the tower.

Dr. Rapperschwyll at once appreciated the situation. He turned sharply around, and remarked with a sneer, "Monsieur is unaccountably awkward." Then he scowled and showed his teeth, for he recognized Fisher.

"It is rather unfortunate," said the New Yorker, with imperturbable coolness. "We shall be imprisoned here a couple of hours at the shortest. Let us congratulate ourselves that we each have intelligent company, besides a charming landscape to contemplate."

The Swiss coldly bowed, and resumed his topographical studies. Fisher lighted a cigar.

"I also desire," continued Fisher, puffing clouds of smoke in the direction of the Teufelmühle, "to avail myself of this opportunity to return forty marks of yours, which reached me, I presume, by a mistake."

"If Monsieur the American physician was not satisfied with his fee," rejoined Rapperschwyll, venomously, "he can without doubt have the affair adjusted by applying to the Baron's valet."

Fisher paid no attention to this thrust, but calmly laid the gold pieces upon the parapet, directly under the nose of the Swiss.

"I could not think of accepting any fee," he said, with deliberate emphasis. "I was abundantly rewarded for my trifling services by the novelty and interest of the case."

The Swiss scanned the American's countenance long and steadily with his sharp little gray eyes. At length he said, carelessly:

"Monsieur is a man of science?"

"Yes," replied Fisher, with a mental reservation in favor of all sciences save that which illuminates and dignifies our national game.

"Then," continued Dr. Rapperschwyll, "Monsieur will perhaps acknowledge that a more beautiful or more extensive case of trephining has rarely come under his observation."

Fisher slightly raised his eyebrows.

"And Monsieur will also understand, being a physician," continued Dr. Rapperschwyll, "the sensitiveness of the Baron himself, and of his friends upon the subject. He will therefore pardon my seeming rudeness at the time of his discovery."

"He is smarter than I supposed," thought Fisher. "He holds all the cards, while I have nothing—nothing, except a tolerably strong nerve when it comes to a game of bluff."

"I deeply regret that sensitiveness," he continued, aloud, "for it had occurred to me that an accurate account of what I saw, published in one of the scientific journals of England or America, would excite wide attention, and no doubt be received with interest on the Continent."

"What you saw?" cried the Swiss, sharply. "It is false. You saw nothing—when I entered you had not even removed the—"

Here he stopped short and muttered to himself, as if cursing his own impetuosity. Fisher celebrated his advantage by tossing away his half-burned

cigar and lighting a fresh one.

"Since you compel me to be frank," Dr. Rapperschwyll went on, with visibly increasing nervousness. "I will inform you that the Baron has assured me that you saw nothing. I interrupted you in the act of removing the silver cap."

"I will be equally frank," replied Fisher, stiffening his face for a final effort. "On that point, the Baron is not a competent witness. He was in a state of unconsciousness for some time before you entered. Perhaps I was removing the silver cap when you interrupted me—"

Dr. Rapperschwyll turned pale.

"And, perhaps," said Fisher, coolly, "I was replacing it."

The suggestion of this possibility seemed to strike Rapperschwyll like a sudden thunderbolt from the clouds. His knees parted, and he almost sank to the floor. He put his hands before his eyes, and wept like a child, or, rather, like a broken old man.

"He will publish it! He will publish it to the court and to the world!" he cried, hysterically. "And at this crisis—"

Then, by a desperate effort, the Swiss appeared to recover to some extent his self control. He paced the diameter of the platform for several minutes, with his head bent and his arms folded across the breast. Turning again to his companion, he said:

"If any sum you may name will—"

Fisher cut the proposition short with a laugh.

"Then," said Rapperschwyll, "if—if I throw myself on your generosity —"

"Well?" demanded Fisher.

"And ask a promise, on your honor, of absolute silence concerning what you have seen?"

"Silence until such time as the Baron Savitch shall have ceased to exist?"

"That will suffice," said Rapperschwyll. "For when he ceases to exist I die. And your conditions?"

"The whole story, here and now, and without reservation."

"It is a terrible price to ask me," said Rapperschwyll, "but larger interests than my pride are at stake. You shall hear the story."

"I was bred a watchmaker," he continued, after a long pause, "in the Canton of Zurich. It is not a matter of vanity when I say that I achieved a

marvellous degree of skill in the craft. I developed a faculty of invention that led me into a series of experiments regarding the capabilities of purely mechanical combinations. I studied and improved upon the best automata ever constructed by human ingenuity. Babbage's calculating machine especially interested me. I saw in Babbage's idea the germ of something infinitely more important to the world.

"Then I threw up my business and went to Paris to study physiology. I spent three years at the Sorbonne and perfected myself in that branch of knowledge. Meanwhile, my pursuits had extended far beyond the purely physical sciences. Psychology engaged me for a time; and then I ascended into the domain of sociology, which, when adequately understood, is the summary and final application of all knowledge.

"It was after years of preparation, and as the outcome of all my studies, that the great idea of my life, which had vaguely haunted me ever since the Zurich days, assumed at last a well-defined and perfect form."

The manner of Dr. Rapperschwyll had changed from distrustful reluctance to frank enthusiasm. The man himself seemed transformed. Fisher listened attentively and without interrupting the relation. He could not help fancying that the necessity of yielding the secret, so long and so jealously guarded by the physician, was not entirely distasteful to the enthusiast.

"Now, attend, Monsieur," continued Dr. Rapperschwyll, "to several separate propositions which may seem at first to have no direct bearing on each other.

"My endeavors in mechanism had resulted in a machine which went far beyond Babbage's in its powers of calculation. Given the data, there was no limit to the possibilities in this direction. Babbage's cogwheels and pinions calculated logarithms, calculated an eclipse. It was fed with figures, and produced results in figures. Now, the relations of cause and effect are as fixed and unalterable as the laws of arithmetic. Logic is, or should be, as exact a science as mathematics. My new machine was fed with facts, and produced conclusions. In short, it reasoned; and the results of its reasoning were always true, while the results of human reasoning are often, if not always, false. The source of error in human logic is what the philosophers call the 'personal equation.' My machine eliminated the personal equation; it proceeded from cause to effect, from premise to conclusion, with steady precision. The human intellect is fallible; my machine was, and is, infallible in its processes.

"Again, physiology and anatomy had taught me the fallacy of the

medical superstition which holds the gray matter of the brain and the vital principle to be inseparable. I had seen men living with pistol balls imbedded in the medulla oblongata. I had seen the hemispheres and the cerebellum removed from the crania of birds and small animals, and yet they did not die. I believed that, though the brain were to be removed from a human skull, the subject would not die, although he would certainly be divested of the intelligence which governed all save the purely involuntary actions of his body.

"Once more: a profound study of history from the sociological point of view, and a not inconsiderable practical experience of human nature, had convinced me that the greatest geniuses that ever existed were on a plane not so very far removed above the level of average intellect. The grandest peaks in my native country, those which all the world knows by name, tower only a few hundred feet above the countless unnamed peaks that surround them. Napoleon Bonaparte towered only a little over the ablest men around him. Yet that little was everything, and he overran Europe. A man who surpassed Napoleon, as Napoleon surpassed Murat, in the mental qualities which transmute thought into fact, would have made himself master of the whole world.

"Now, to fuse these three propositions into one: suppose that I take a man, and, by removing the brain that enshrines all the errors and failures of his ancestors away back to the origin of the race, remove all sources of weakness in his future career. Suppose, that in place of the fallible intellect which I have removed, I endow him with an artificial intellect that operates with the certainty of universal laws. Suppose that I launch this superior being, who reasons truly, into the hurly burly of his inferiors, who reason falsely, and await the inevitable result with the tranquillity of a philosopher.

"Monsieur, you have my secret. That is precisely what I have done. In Moscow, where my friend Dr. Duchat had charge of the new institution of St. Vasili for hopeless idiots, I found a boy of eleven whom they called Stépan Borovitch. Since he was born, he had not seen, heard, spoken or thought. Nature had granted him, it was believed, a fraction of the sense of smell, and perhaps a fraction of the sense of taste, but of even this there was no positive ascertainment. Nature had walled in his soul most effectually. Occasional inarticulate murmurings, and an incessant knitting and kneading of the fingers were his only manifestations of energy. On bright days they would place him in a little rocking chair, in some spot where the sun fell warm, and

he would rock to and fro for hours, working his slender fingers and mumbling forth his satisfaction at the warmth in the plaintive and unvarying refrain of idiocy. The boy was thus situated when I first saw him.

"I begged Stépan Borovitch of my good friend Dr. Duchat. If that excellent man had not long since died he should have shared in my triumph. I took Stépan to my home and plied the saw and the knife. I could operate on that poor, worthless, useless, hopeless travesty of humanity as fearlessly and as recklessly as upon a dog bought or caught for vivisection. That was a little more than twenty years ago. Today Stépan Borovitch wields more power than any other man on the face of the earth. In ten years he will be the autocrat of Europe, the master of the world. He never errs; for the machine that reasons beneath his silver skull never makes a mistake."

Fisher pointed downward at the old custodian of the tower, who was seen toiling up the hill.

"Dreamers," continued Dr. Rapperschwyll, "have speculated on the possibility of finding among the ruins of the older civilizations some brief inscription which shall change the foundations of human knowledge. Wiser men deride the dream, and laugh at the idea of scientific kabbala. The wiser men are fools. Suppose that Aristotle had discovered on a cuneiform covered tablet at Nineveh the few words, 'Survival of the Fittest.' Philosophy would have gained twenty-two hundred years. I will give you, in almost as few words, a truth equally pregnant. *The ultimate evolution of the creature is into the creator.* Perhaps it will be twenty-two hundred years before the truth finds general acceptance, yet it is not the less a truth. The Baron Savitch is my creature, and I am his creator—creator of the ablest man in Europe, the ablest man in the world.

"Here is our ladder," Monsieur. "I have fulfilled my part of the agreement. Remember yours."

### III.

After a two months' tour of Switzerland and the Italian lakes, the Fishers found themselves at the Hotel Splendide in Paris, surrounded by people from the States. It was a relief to Fisher, after his somewhat bewildering experience at Baden, followed by a surfeit of stupendous and ghostly snow peaks, to be once more among those who discriminated between a straight flush and a crooked straight, and whose bosoms thrilled



responsive to his own at the sight of the star-spangled banner. It was particularly agreeable for him to find at the Hotel Splendide, in a party of Easterners who had come over to see the Exposition, Miss Bella Ward, of Portland, a pretty and bright girl, affianced to his best friend in New York.

With much less pleasure, Fisher learned that the Baron Savitch was in Paris, fresh from the Berlin Congress, and that he was the lion of the hour with the select few who read between the written lines of politics and knew the dummies of diplomacy from the real players in the tremendous game. Dr. Rapperschwyll was not with the Baron. He was detained in Switzerland, at the deathbed of his aged mother.

This last piece of information was welcome to Fisher. The more he reflected upon the interview on the Mercuriusberg, the more strongly he felt it to be his intellectual duty to persuade himself that the whole affair was an illusion, not a reality. He would have been glad, even at the sacrifice of his confidence in his own astuteness, to believe that the Swiss doctor had been amusing himself at the expense of his credulity. But the remembrance of the scene in the Baron's bedroom at the Badischer Hof was too vivid to leave the slightest ground for this theory. He was obliged to be content with the thought that he should soon place the broad Atlantic between himself and a creature so unnatural, so dangerous, so monstrously impossible as the Baron Savitch.

Hardly a week had passed before he was thrown again into the society of that impossible person.

The ladies of the American party met the Russian Baron at a ball in the New Continental Hotel. They were charmed with his handsome face, his refinement of manner, his intelligence and wit. They met him again at the American Minister's, and, to Fisher's unspeakable consternation, the acquaintance thus established began to make rapid progress in the direction of intimacy. Baron Savitch became a frequent visitor at the Hotel Splendide.

Fisher does not like to dwell upon this period. For a month his peace of mind was rent alternately by apprehension and disgust. He is compelled to admit that the Baron's demeanor toward himself was most friendly, although no allusion was made on either side to the incident at Baden. But the knowledge that no good could come to his friends from this association with a being in whom the moral principle had no doubt been supplanted by a system of cog-gear, kept him continually in a state of distraction. He would gladly have explained to his American friends the true character of the

Russian, that he was not a man of healthy mental organization, but merely a marvel of mechanical ingenuity, constructed upon a principle subversive of all society as at present constituted—in short, a monster whose very existence must ever be revolting to right-minded persons with brains of honest gray and white. But the solemn promise to Dr. Rapperschwyll sealed his lips.

A trifling incident suddenly opened his eyes to the alarming character of the situation, and filled his heart with a new horror.

One evening, a few days before the date designated for the departure of the American party from Havre for home, Fisher happened to enter the private parlor which was, by common consent, the headquarters of his set. At first he thought that the room was unoccupied. Soon he perceived, in the recess of a window, and partly obscured by the drapery of the curtain, the forms of the Baron Savitch and Miss Ward of Portland. They did not observe his entrance. Miss Ward's hand was in the Baron's hand, and she was looking up into his handsome face with an expression which Fisher could not misinterpret.

Fisher coughed, and going to another window, pretended to be interested in affairs on the Boulevard. The couple emerged from the recess. Miss Ward's face was ruddy with confusion, and she immediately withdrew. Not a sign of embarrassment was visible on the Baron's countenance. He greeted Fisher with perfect self-possession and began to talk of the great ballroom in the Place du Carrousel.

Fisher pitied but could not blame the young lady. He believed her still loyal at heart to her New York engagement. He knew that her loyalty could not be shaken by the blandishments of any man on earth. He recognized the fact that she was under the spell of a power more than human. Yet what would be the outcome? He could not tell her all; his promise bound him. It would be useless to appeal to the generosity of the Baron; no human sentiments governed his exorable purposes. Must the affair drift on while he stood tied and helpless? Must this charming and innocent girl be sacrificed to the transient whim of an automaton? Allowing that the Baron's intentions were of the most honorable character, was the situation any less horrible? Marry a Machine! His own loyalty to his friend in New York, his regard for Miss Ward, alike loudly called on him to act with promptness.

And, apart from all private interest, did he not owe a plain duty to society, to the liberties of the world? Was Savitch to be permitted to proceed in the career laid out for him by his creator, Dr. Rapperschwyll? He (Fisher)

was the only man in the world in a position to thwart the ambitious programme. Was there ever greater need of a Brutus?

Between doubts and fears, the last days of Fisher's stay in Paris were wretched beyond description. On the morning of the steamer day he had almost made up his mind to act.

The train for Havre departed at noon, and at eleven o'clock the Baron Savitch made his appearance at the Hotel Splendide to bid farewell to his American friends. Fisher watched Miss Ward closely; There was a constraint in her manner which fortified his resolution. The Baron incidentally remarked that he should make it his duty and pleasure to visit America within a very few months, and that he hoped then to renew the acquaintances now interrupted. As Savitch spoke, Fisher observed that his eyes met Miss Ward's, while the slightest possible blush colored her cheeks. Fisher knew that the case was desperate, and demanded a desperate remedy.

He now joined the ladies of the party in urging the Baron to join them in the hasty lunch that was to precede the drive to the station. Savitch gladly accepted the cordial invitation. Wine he politely but firmly declined, pleading the absolute prohibition of his physician. Fisher left the room for an instant, and returned with the black bottle which had figured in the Baden episode.

"The Baron," he said, "has already expressed his approval of the noblest of our American products, and he knows that this beverage has good medical endorsement." So saying, he poured the remaining contents of the Kentucky bottle into a glass, and presented it to the Russian.

Savitch hesitated. His previous experience with the nectar was at the same time a temptation and a warning, yet he did not wish to seem discourteous. A chance remark from Miss Ward decided him.

"The Baron," she said, with a smile, "will certainly not refuse to wish us *bon voyage* in the American fashion."

Savitch drained the glass and the conversation turned to other matters. The carriages were already below. The parting compliments were being made, when Savitch suddenly pressed his hands to his forehead and clutched at the back of a chair. The ladies gathered around him in alarm.

"It is nothing," he said faintly; "a temporary dizziness."

"There is no time to be lost," said Fisher, pressing forward. "The train leaves in twenty minutes. Get ready at once, and I will meanwhile attend to our friend."

Fisher hurriedly led the Baron to his own bedroom. Savitch fell back

upon the bed. The Baden symptoms repeated themselves. In two minutes the Russian was unconscious.

Fisher looked at his watch. He had three minutes to spare. He turned the key in the lock of the door and touched the knob of the electric annunciator.

Then, gaining the mastery of his nerves by one supreme effort for self-control, Fisher pulled the deceptive wig and the black skullcap from the Baron's head. "Heaven forgive me if I am making a fearful mistake!" he thought. "But I believe it to be best for ourselves and for the world." Rapidly, but with a steady hand, he unscrewed the silver dome.

The Mechanism lay exposed before his eyes. The Baron groaned. Ruthlessly Fisher tore out the wondrous machine. He had no time and no inclination to examine it. He caught up a newspaper and hastily enfolded it. He thrust the bundle into his open travelling bag. Then he screwed the silver top firmly upon the Baron's head, and replaced the skullcap and the wig.

All this was done before the servant answered the bell. "The Baron Savitch is ill," said Fisher to the attendant, when he came. "There is no cause for alarm. Send at once to the Hotel de l'Athénée for his valet, Auguste." In twenty seconds Fisher was in a cab, whirling toward the Station St. Lazare.

When the steamship Pereire was well out at sea, with Ushant five hundred miles in her wake, and countless fathoms of water beneath her keel, Fisher took a newspaper parcel from his travelling bag. His teeth were firm set and his lips rigid. He carried the heavy parcel to the side of the ship and dropped it into the Atlantic. It made a little eddy in the smooth water, and sank out of sight. Fisher fancied that he heard a wild, despairing cry, and put his hands to his ears to shut out the sound. A gull came circling over the steamer—the cry may have been the gull's.

Fisher felt a light touch upon his arm. He turned quickly around. Miss Ward was standing at his side, close to the rail.

"Bless me, how white you are!" she said. "What in the world have you been doing?"

"I have been preserving the liberties of two continents," slowly replied Fisher, "and perhaps saving your own peace of mind."

"Indeed!" said she; "and how have you done that?"

"I have done it," was Fisher's grave answer, "by throwing overboard the Baron Savitch."

Miss Ward burst into a ringing laugh. "You are sometimes too droll, Mr. Fisher," she said.

# "The Artificial Man"

A Semi-Scientific Story

Don Quichotte

(1884)

Before a bright fire, whose flames cast fantastic shadows on the wall of the laboratory, his emaciated body lost in the folds of a gray, brocaded wrapper, sat a grave, silent, graceful, eccentric Being. His glance was restless, but without vivacity, his mouth scarcely shaded by flaxen down, his lips dry and colorless. Over this mask a waxy, bloodless skin, and, to crown all, scanty, silky, sickly hair, whose dull red color reminded me of German dolls' wigs.

He rose, returned my salutation, and reseated himself. The chilling silence of the vast apartment descended upon us like a pall. Who was this man who installed himself in the chemist's armchair, and made himself so completely at home?—who disdained to speak to me, or glance at the thousand curiosities around him? An upholsterer, a savant, a creditor? An invalid—a madman, perhaps.

I shuddered. Why had not my friend warned me that in this sanctuary of science, where study had so often brought us together, where no profane foot ever entered, I should find this mannikin?

*Mannikin!* The word reassured me. On seeing me, it is true the nondescript had risen, but slowly, with the mechanical deliberateness of an automaton. I even thought I noticed a creaking like that of a badly oiled spring. And those restless eyes, those blinking lids, the convulsive shiver that occasionally shook his left hand. Terror overpowered me, and, to put an end to these torturing doubts, I said, sharply, to the stranger:

"Do you smoke, sir?"

He declined with a courteous gesture the cigar case I extended to him, and, in a thin voice, without looking at me, said:

"Not on operating days, thank you."

"I will throw away my cigar if the smoke affects you."

"Keep it, I beg of you. I am not so effeminate. My lungs are not strong

enough to admit of my smoking, but yours does not disturb me."

There was no longer any doubt. He was an invalid. I longed to inquire further.

"You spoke of an operation," I insinuated; "are you suffering from any chronic difficulty?"

"Not in the least."

"Some wound, perhaps?"

"None whatever."

"And yet you require the services of a physician or surgeon."

"Not at all."

"But the operation?"

"My operation, belongs to the department of chemistry," said the mysterious Being. "It is merely an absorption of organic substances—a repast, if you choose—which is repeated every eight days, and which I consume by means of this."

He unfastened his waistcoat, drew aside his shirt, and showed, above the abdomen, like a metal button on the delicate pink flesh, a little silver plug.

"This apparatus," he continued, "is in immediate connection with the cardiac opening to my stomach. Your friend, the chemist, will come to administer the usual dose. Would you like to see the operation?"

The stranger said all this in the simplest manner. I was struck dumb.

"Is this treatment made necessary by a cancer in the stomach?"

"I have told you," said the man of tubes and injectors, "that I am neither an invalid nor a subject. I am, to my sorrow, a product of modern chemistry, a specimen of the miserable race which will soon supersede natural generation; in a word, I represent to you, from head to foot, a systematical, artificial, mechanical Man."

"You should add *paradoxical*," I interrupted smiling; "for, even if I believe that chemistry has intoxicated you, in imitation, alas! of all our contemporaries, decidedly it is not chemistry which originally produced you."

"Assuredly it was nothing else. I have neither father nor mother."

"Good heaven!" said I, half angrily, "let us drop this Mother Goose nonsense, and talk seriously."

"Nothing can be more serious, I assure you. The germ from which I sprang was compounded by a skillful microscopist. It was placed in a little incubator, subjected to a certain temperature, with surroundings conformable to the laws of nature. At the risk of redoubling your amazement, I will add

that this germ possessed such vitality that two other beings were developed as well as myself. But the chemist sacrificed them, so as to devote himself exclusively to my miraculous formation."

"So you drew your first breath in a bell glass or retort?"

"Exactly. My organs developed, my bones knit, my heart beat, my brain thought, my eyes opened. In short, I saw the light, like a chickling that breaks the shell, in the soft atmosphere of an incubator."

"The romance is charming. A little too much in the style of Jules Verne, but—"

My singular interlocutor gathered up all his strength in a movement of his limbs, which made his joints creak. He arose, planted himself in front of me, and said, "Look!"

Before I could grasp the phenomenon, the top of his skull opened like a snuffbox and the brain, removed from its articulated case, lay palpitating in his hands. At the same moment his eyes rolled wildly in their sockets, his nostrils quivered convulsively, his lips ejaculated incoherent syllables.

I recoiled with horror. But the stranger restored his brain, resumed his former attitude, and said, in an indolent tone: "What do you think now?"

I stood silent. What would he do next? Would this loosely constructed creature expose his lungs, uncoil his viscera, scatter about the room his limbs rent from his body? Leaning against a photographer's brace, where my flaccid arms and quaking legs found a much needed support, I could not take my eyes from this living mechanism.

"Reassure yourself," he said. "The exhibition is over. The brain, that nerve centre, and the stomach, the nutritive focus, are the only organs whose functions I can suspend at will. The sole advantage of my miserable condition is that if any moral or physical difficulty manifest itself, I can discover the cause and apply the remedy. You are now convinced, I hope. My 'romance,' you said. It will be the romance of your children—of all the human beings that the earth shall bear upon her exhausted bosom. The time is near. Universal decrepitude advances, slowly but steadily. In one century, perhaps in less, indefatigable chemistry will everywhere substitute the false for the true. All things being known, phenomena, until then mysterious, can be produced at will, and man, absolute master of the secrets of creation, will transform inanimate matter into exhaustless sources of life.

"I am, in fact, only the prototype of these chemical creations. Sprung from a successful experiment, I demonstrate the possibility of a human

compound or synthesis. You know my origin. It remains for me to explain my development.

"From my infancy, the mechanism to which I owed my life disposed my organization to a completely vitiated food, so the milk that first nourished me was formed of the most composite products; lime diluted in an emulsion of bran; pap of stiffened white of egg; farina dissolved in margaric acid and water. The stomach of a normal infant would have rejected instinctively these fraudulent combinations. Mine thrived on them, and after two years of this regime I was permitted to vary the programme with a preparation of chocolate, or soup made on the pampas of America from old buffalo skins.

"I grew thus, a hothouse plant, without strength or sap. At ten years of age I could scarcely talk. Through my transparent skin the eye could follow the violet network of my veins. My breast, placed under the intense light of a lamp, showed the details of the organs and revealed the mysterious functions of circulation, digestion, sensation. Faithful to his theories, the chemist continued to nourish me with adulterated food. It is thus that I consumed, without pleasure and without profit, preparations of artificial meats and hypothetical vegetables. Coffee manufactured in a mold, beer made from nuxvomica, vitriolized liqueurs, preserves treated with benzoic or butyric acid, the whole arsenal of succedanea which the imperfect chemistry of our day devises, cooperated in the sickly development of my pitiful organization.

"At the age when the exuberance of youth should give new strength I felt nothing but exhaustion. The generous ardor of virile blood did not agitate my languid frame. All pleasure is foreign to me. My floating thoughts conceived, with great effort, a few coherent ideas, and disconnected dreams haunted my days and nights. Incapable of the slightest exertion, I was happy only near a fire or in the warm light of the summer sun. My almost negative sensibility accepted without revolt the anatomical experiments in which my creator, the chemist, delighted. Last year I underwent trepanning, which permits the savant to follow, day by day, the manifestations of life; and my esophagus opens to the different tubes of the nutritive preparations by which it is regenerated.

"Such experiments on a subject like you would have produced copious hemorrhages, painful shocks. I endured them with indifference, like a plant. Thanks to this vegetative existence, to these artificial resources, to these successive modifications of my temperament, I have reached the age at which you now see me. Will you guess that age, now that you know the history of



my formation?"

"Thirty-two years," I ventured, after a little reflection.

He smiled. "I am scarcely eighteen. This senile appearance I owe to the chemical methods of which you and your children will realize the dangerous benefits. Constitutional debility will be the heritage of your posterity, and in a few centuries these miserable but highly perfected races will walk the earth with their families reduced to the lowest degradation, incapable of exertion, of industry, of reproduction. In that mechanical age individuality and free will can exist no longer. Thought, that secretion of well-balanced organisms, will no more preside over human actions. Scientific analysis pushed to its extreme limits, and the synthesis which completes it, will rule this decrepit world. Then the reaction. Primitive barbarism will reappear among this effete civilization, and nations which were great through courage, learning, nobleness, will sink lower than the brutes and finally disappear in one grand cataclysm, that a new generation may grow upon their ruin; through the same phases of infancy, barbarism, progress, enlightenment, death: for such is the law of the eternal repetition of things."

So spake in my startled ears the Artificial Man.

# Your Roomba's Great-Great-Grandparents

"The Automatic Maid-of-All-Work"

"Ely's Automatic Housemaid"

In the midst of stories about artificial supermen and even darker tales (covered in the next section), there was a broad group of *comic* tales about automata taking over the work of humans. While there had been a palpable fear of machines replacing craftsmen and artisans since the late 1700s, these stories display a certain amount of enthusiasm as well as caution. Because what would be better for an upper middle class family than the opportunity to replace a pesky domestic with a compliant, uncomplaining servant?

"The Automatic Maid-of-All-Work" is the archetype for this type of story—the newly invented artificial household servant is able to perform great feats of cleaning and cooking, but too soon the machine goes comically, and a little frighteningly, awry. Two things make this story different from many others. First is the inhuman form of this automaton. It is entirely practical in design. Secondly, the narrator/protagonist of this piece is female. Not much is known about author M. L. Campbell (he is perhaps Canadian); the story was originally published in *Canadian Magazine* in July of 1893.

Sadly, "Ely's Automatic Housemaid" is the only story in this collection *written* by a woman: Elizabeth W. Bellamy. Bellamy (1837–1900) was a teacher and critically acclaimed Southern author. Dependent on her writing income, her stories were inclusive of race and class and, in this case, genre as well.



# "The Automatic Maid-Of-All-Work"

A Possible Tale of the Near Future

M. L. Campbell

(1893)

Yes; I mean what I say—an automatic maid-of-all-work, invented by my husband, John Matheson.

You see it was this way,—the old story of servants, ever since we began housekeeping. We've had every kind, and if we did get a good one, something would come along to take her off.

You know John has invented lots of things. There's that door spring now,—not much when you look at it but it brings in quite a little income. He used to say that he was spending his spare time on an automatic maid-of-all-work. Of course, I laughed, said I wished he would, and thought no more of it.

Well, the day the last girl left, John announced that the automatic maid-of-all-work was completed, and that he would stay at home next day and show me how to work it.

Of course, I didn't believe in it.

It was a queer-looking thing, with its long arms, for all the world like one of those old-fashioned windmills you see in pictures of foreign countries. It had a face like one of those twenty-four hour clocks, only there were no hands; each number was a sort of electric button. It was run by electricity, you know. The battery was inside. I didn't understand it very well; I never could see into anything in the way of machinery; I never pretend to listen when John tells me about his inventions. The figures, as I said, were buttons, and you just had to connect them with some wires inside. There were a lot of wires, each for some kind of work which would be done at the hour indicated by the button you connected it with. This was handy, so that we would not have to get up in the morning till breakfast-time, and would be handy in lots of ways.

"Now look, Fanny," said John; "do try and understand how it works. You see this wire now; I'll connect it with button number six, and at that hour

the maid will light the fire, sweep the kitchen and then the dining room. Now this button number seven will be the one to set the alarm to. It will sound for about ten minutes (I'd sound it now only it makes a fearful noise); then the maid will go upstairs to turn down the beds—a convenient arrangement in many ways. Then it will go downstairs, lay the cloth for breakfast, make the tea and toast, bring in the things, and ring the breakfast bell. You'll have to leave all the breakfast things on one shelf, of course, and measure the oatmeal and tea also. We won't set any more buttons tonight. It's just as well to be around at first to see that all goes right. There may be some adjustment necessary."

We went to bed then, and it was daylight when I awoke. I was conscious of a peculiar whirring noise, but I hadn't got thoroughly awakened when I heard the most awful screams and thumps, and the two boys came running into our room in their nightdresses, and after them the automatic maid-of-all-work.

By this time I was out of bed, but John sleeps very soundly. He started as the maid jerked the bedclothes down and laid them over the footboard, but he wasn't quick enough. It took him under the arm. It had an awful grip, too,—and laid him across the footboard, after giving him a thump or two, as I do the pillows. (John had watched me do it and had the tiling to perfection. He didn't suppose it would be tried on him, though). He didn't seem quite prepared for such a performance, for he flounced around so that he and the bedclothes, pillows and all, landed in a heap on the floor.

By this time the boys had got over their fright, having been treated in the same manner, and we all laughed. John can't bear to be laughed at. However, we proceeded to dress after the maid had gone downstairs. I could see John was a little nervous, but he didn't want to show it, so he waited till I was ready. The boys got down first, and we could hear them laughing.

"I dare say you'll have to arrange the table a little, Fanny," said John, as we went down, "but that won't be much to do when all the things are on."

Well, we went into the dining room, and sure enough the table was set, and pretty well too, only that the butter dish, with the butter, was upside down on the table, and the coal scuttle was set at John's place, instead of the oatmeal dish. That was because John, who always leaves things in ridiculous places, had left it standing on the back of the stove after putting in the coal ready for the morning fire. The porridge was standing cooked on the stove. We had got an arrangement with a white earthen bowl set into a kettle, and

the bowl had just to be removed and carried in. However, the coal scuttle had stood in the way, and John had to carry it out and bring in the porridge. The toast was scorched a little, but the eggs were boiled just to perfection, and we enjoyed it all immensely.

Meanwhile the maid was upstairs making the beds, and such beds you never saw. You'd think they'd been cast in a mould. The maid came downstairs just as we were through, and then John pulled another wire. After doing so he acted rather strangely. He didn't seem to be able to let go the wire for a minute. It gave him a shock, you know. After that he handled the wires more carefully.

Then the maid proceeded to clear the table. Here was a slight complication, however, for the maid washed everything, and though we had eaten up nearly all, still there was some butter in the dish, a bowl of sugar, and the salt cellar. However, as there was lots of good hot water, the dishes after they were wiped were as clean as could be; but John suggested that for the present, until he could make some improvements, the eatables had better be removed first, for "of course," he said, "there will be some imperfections."

"Now, Fanny, I suppose you want to wash, don't you? You have the clothes ready, I see."

"Yes, but it seems to me the dining room is not swept very clean. Anyway the crumbs ought to be swept up."

"Exactly," returned John, "only, you see, I fixed it so that it would just run around the table once before breakfast, then afterwards you can have all the furniture moved out and the whole room swept every day."

Well, the maid proceeded to remove the furniture. It went to the middle of the room, then began to circle around, removing everything it came in contact with, and setting things out in the hall. John dropped the leaves of the table, and all went well till it came to the stove and attempted to remove that also; but something was amiss, and it veered off to one side. John started forward to turn it off that track, but it promptly picked him up and removed him. I forgot to say that a revolving brush in the bottom was sweeping all this time, and now the thing was making the last circuit as I thought, for it had touched the wall on three sides, and I was wondering how it would get into the corners, while John watched the stove, and wondered if it could pass between that and the wall without coming in contact with the stove. But there the passage was not wide enough, and the stove, a little open grate, was picked up and removed. The pipes fell down and made a lot of dirt, but that

was pretty well swept up, as the maid had to make two or three more circles to allow for the corners. John replaced the furniture, as he had not provided for that part of the work. The stove we decided to carry out for the season, but in the meantime he had started the maid at the washing. You see there was no time lost between things; and I tell you those clothes were washed, and so was John's coat, which being a pretty good one he had taken off and laid on the bench. Then we had the kitchen scrubbed, the same apparatus which did the sweeping doing that also. John adjusted it so that the furniture was merely pushed aside. The worst of the thing was that you could not stop the maid, when it got going, till it had run down, and what was more, if you interfered with the wires when it was going, you were apt to get a shock from the battery. This was inconvenient sometimes; for instance, after the kitchen was all scrubbed, the thing still ran around the walls scrubbing as hard as ever. John said the only thing was to pull another wire and set it to work at something else; it would run till after the tea dishes were washed, anyway, and probably we could find something harmless to keep it employed. Just then John was called out to speak to a man about some coal, and I undertook to head the thing across the middle of the room. Unfortunately it rushed straight into the dining room, water pail and all. I didn't care much. I wanted a new carpet for that room, anyway, and I knew that sooty spot would never come out. The water in the pail was very dirty by this time. John had not thought of its having to be changed.

Presently John returned, and we got into the kitchen again. There was another funny thing about it. Whenever anyone got going ahead of it in the same direction it was sure to follow, and the only way to get out of its road was to double back on your own track and dodge it. It was the current of air it followed. John said he had a reason for making it that way. While sweeping the kitchen it got after one of the boys once, and it dodged around tables and chairs just as he did, till John told him to turn and go back. It got after Bruno when we got it out of the dining room into the kitchen. He had just come in from the barn to get something to eat. He turned tail and howled, but he could not get out of the way till he jumped out of the window. The cat fared worse than Bruno though, for she was picked up along with the wiping cloth and rubbed over the floor for about three yards before she managed to get free. There was quite a hole in the window, and we have not seen the cat since.

John said there was a fine arrangement for answering the door. Of course, in some instances, we would have to go ourselves, especially if any

old lady or timid person, who had not made the acquaintance of the maid, were expected, but if the postman or parcel delivery it would be all right. Anyone could send in a card, too, you see. But the best of all was the arrangement for putting tramps off the premises. John was just explaining how this was done when Fred, exclaimed, "There's an old fellow now; I wonder if he is coming here!" Yes, sure enough; he turned in at the gate, and presently there was a ring at the doorbell. Beggars are so impudent, and this was an old offender, so I didn't say anything when John pressed the wire, and we all followed to the door to see the effect, John remarking that it wouldn't hurt him. The door was opened quite quietly, but closed with a bang after the maid. At first, upon re-opening the door, we thought it had missed fire, for the tramp, looking somewhat scared, stood at one side of the doorway, but the maid was scuttling down the path with some limp figure in its arms. I was sorry to recognize an uncle of John's, from whom John had expectations. I knew his bald head. The maid had him by the middle, and his feet and head hung down, so that his hat dropped off. He was too much surprised to attempt resistance, and the maid deposited him in a heap in the gutter, and then returned. We were so bothered by the turn affairs had taken that we forgot to get out of the way. Fred received a slap which sent him sprawling. John was lifted bodily, after the manner of his uncle, and laid upon the table, while I, my skirts being caught, was forced to run backwards in a very undignified manner, till, by grasping a door knob, I wrenched myself free at the expense of a width of my skirt. I stood hanging on to that door knob as if I expected momentarily to be snatched up and thrown out of the window, when my eyes happened to fall upon Tommy. He was lying upon his back on the floor, his legs slowly waving in the air. He made not a sound. The expression on his face gave me such a start that I relaxed my hold on the door knob, thinking that he was injured internally. But he raised his hand, and feebly waved me aside. He was simply too tired to laugh any more, and was obliged to lie down and wave his legs to express his feelings. Fred had begun to whimper after picking himself up, but, catching sight of Tommy, laughed instead, until something in their father's eye caused both of the boys to take themselves out of doors. However, they perched upon the fence just outside of a window and looked in.

"You see, Fanny, we must expect some complications at first," said John, "but after awhile we'll get used to running it better." This he said as the maid started out of the front door again, after having buzzed around the hall

for a minute; for, as I told you, it was necessary to start it at some new work in order to stop what it was doing, and, in the meantime, while we were recovering our breath, it was making trips through the hall to the front gate, and hence to the gutter and back again. John was explaining that we could arrange the length of the trip as we pleased, and it need ordinarily be only to the front door. Just then, however, we heard most awful screams, and we rushed to the door to see what was the matter. It seems that the maid had encountered at the gate the form of a stout, elderly female, with a basket and an umbrella, and of course had proceeded to remove the obstacle. However, the obstacle refused to be removed, and they were having a lively time of it. A crowd was beginning to collect, and a policeman appeared around the corner. He interfered in behalf of the stout female, and attempted to arrest the maid. The maid, however, made short work of him. It did not succeed, it's true, in depositing him in the ditch, but it spoiled his hat, and caused him to beat a hasty retreat; then, having removed all obstacles, traversed the remainder of the limit and returned to the house, followed by another angry policeman, who, after considerable persuasion, was induced to depart.

After the door closed upon the policeman, John looked at me and I at him. The maid had accomplished several revolutions around the dining room and was about to return. "Mercy, Fanny, you're always talking how much there is to do; can't you think of something I'm not supposed to know." "No," I answered, grimly, but an idea struck John, and he immediately hurried to pull another wire. He did not accomplish it with impunity, however, and I'm sorry to say he made use of some expressions, as he danced around for a minute, which I was glad the boys didn't hear.

The maid now went out to the woodshed, and John fixed the handle of the axe into the attachment at the end of one of the arms. Here was something out of the ordinary way, and John brightened up considerably as the axe began to move up and down with a regular, double motion, reached forward, struck a stick at random with the axe blade so as to catch the stick, drew it forward into position and struck it, splitting it in the centre, and threw the pieces with two other arms into the corner, and so on till the pile began to get low. Any sticks that were not split fine enough, John threw back.

All proceeded well enough till the last stick was split. Then the maid started to buzz around in search of more. It attacked the saw horse and demolished it, ran into a tub and reduced it to kindling wood, ripped up a barrel of ashes and raised a terrible dust which completely drove John into



the house. All this time he was trying to get near enough to start it off on another track, but it wheeled around and flung the axe so menacingly that John got excited and lost his head.

When the dust had subsided sufficiently we went out again. By this time the maid had anchored beside the new wood pile and was splitting it over. This would not have mattered much; we didn't mind the wood being reduced to matches, but it was close to the shed window and the sticks were being flung through, carrying broken glass with them into the street. John did not care for another visit from the policeman, but he was completely nonplussed. Just then he heard a stifled chuckle and looking over his shoulder he saw several boys perched on the fence and among them our own, who immediately dropped down. But what maddened John was the sight of a newspaper reporter also, who was evidently sketching the scene. Then the air began to be filled with flying missiles which John threw at the maid, till, by some lucky hit, some of the machinery was jarred and the maid rushed wildly around the shed, the axe now slashing about with a motion evidently intended for some other office than wood chopping. John ran to shut the door in the face of the reporter who was filling sheets with sketches. The maid, however, started after him John stopped, tried to dodge, hesitated, then ran out of the back gate and down the road, the maid thrashing at him with the axe. This was serious. I ran to the gate and anxiously looked after them, while the boys and reporter followed in the wake of the maid. I very much feared the maid would run into something and do some damage, but I soon saw that, as, of course, John avoided all obstacles so did the maid and simply followed him. I wondered why he did not reverse and pass the maid, thus putting it off the track. Presently, however, John returned alone and looking somewhat travel-stained. He pushed past me and went upstairs to the bathroom. I did not dare to follow to ask questions, but Fred and Tommy also returned soon and told me what happened after I lost sight of them.

It seems that, first of all, the axe flew off the handle and chopped a rooster, which was scurrying out of the way, almost in two. Then they caught up with a cow. It was quite a bit out of town, and she started to run in the same direction. John swerved to one side and the maid caught up with the cow and belabored her with the axe handle. This maddened the cow so that she made for the river and rushed in, the maid after her. They slashed about in the stream for a minute: then the maid sank and the cow appeared on the other side.

Next morning, about an hour after John went down town, he sent up a new carpet for the dining room. We have a German girl now, and I don't know but that she's better than the automatic maid-of-all-work.

# "Ely's Automatic Housemaid"

Elizabeth W. Bellamy

(1899)

In order for a man to have faith in such an invention, he would have to know Harrison Ely. For Harrison Ely was a genius. I had known him in college, a man amazingly dull in Latin and Greek and even in English, but with ideas of his own that could not be expressed in language. His bent was purely mechanical, and found expression in innumerable ingenious contrivances to facilitate the study to which he had no inclination. His self-acting lexicon holder was a matter of admiring wonder to his classmates, but it did not serve to increase the tenacity of his mental grasp upon the contents of the volume, and so did little to recommend him to the faculty. And his self-feeding safety student lamp admirably illuminated everything for him save the true and only path to an honorable degree.

It had been years since I had seen him or thought of him, but the memory is tenacious of small things, and the big yellow envelope which I found one morning awaiting me upon my breakfast table brought his eccentric personality back to me with a rush. It was addressed to me in the Archimedean script always so characteristic of him, combining, as it seemed to do, the principles of the screw and of the inclined plane, and in its superscription Harrison Ely stood unmistakably revealed.

It was the first morning of a new cook, the latest potentate of a dynasty of ten who had briefly ruled in turn over our kitchen and ourselves during the preceding three months, and successively abdicated in favor of one another under the compelling influences of popular clamor, and in the face of such apolitical crisis my classmate's letter failed to receive immediate attention. Unfortunately but not unexpectedly the latest occupant of our culinary throne began her reign with no conspicuous reforms, and we received in gloomy silence her preliminary enactments in the way of greasy omelette and turbid and flavorless coffee, the yellow screed of Harrison Ely looking on the while with bilious sympathy as it leaned unopened against the water bottle beside me.

As I drained the last medicinal drop of coffee my eye fell upon it, and

needing a vicarious outlet for my feelings toward the cook, I seized it and tore it viciously open. It contained a letter from my classmate and half a dozen printed circulars. I spread open the former, and my eye fastened at once upon this sympathetic exordium:

"Doubtless, my dear friend, you have known what discomfort it is to be at the mercy of incompetent domestics—" But my attention was distracted at this point by one of the circulars, which displayed an array of startling, cheering, alluring words, followed by plentiful exclamation points, that, like a bunch of keys, opened to my enraptured vision the gates of a terrestrial Paradise, where Bridgets should be no more, and where ill-cooked meals should become a mechanical impossibility. The boon we had been sighing for now presented itself for my acceptance, an accomplished fact. Harrison Ely had invented "An Automatic Household Beneficent Genius—A Practical Realization of the Fabled Familiar of the Middle Ages." So the circular set forth.

Returning to the letter, I read that Harrison Ely, having exhausted his means in working out his invention, was unable to manufacture his "machine" in quantity as yet; but that he had just two on hand which he would sell in order to raise some ready money. He hoped that I would buy one of his automatons, and aid him to sell the other.

Never did a request come at a more propitious moment. I had always entertained a kindness for Harrison Ely, and now such was my disgust at the incompetence of Bridget and Juliana and their predecessors that I was eager to stake the price of a "Household Beneficent Genius" on the success of my friend's invention.

So, having grasped the purport of the circulars and letter, I broke forth to my wife:

"My dear, you've heard me speak of Harrison Ely—"

"That man who is always so near doing something great, and never *has* done anything?" said she.

"He has done it at last!" I declared. "Harrison Ely is one of the greatest geniuses the world has ever seen. He has invented an 'Automatic-Electric Machine-Servant.' "

My wife said, "Oh!"

There was not an atom of enthusiasm in that "Oh!" but I was not to be daunted.

"I am ready," I resumed, "to invest my bottom dollar in *two* of Harrison

Ely's machine-servants."

Her eyes were fixed upon me as if they would read my very soul.  
"What do they cost?" she mildly asked.

"In comparison with the benefits to be derived, little enough. Listen!" I seized a circular at random, and began to read:

"The Automatic Household Genius, a veritable Domestic Fairy, swift, silent, sure; a Permanent, Inalienable, First-class Servant, warranted to give Satisfaction."

"Ah!" said my wife; and the enthusiasm that was lacking in the "Oh!" made itself eloquent in that "Ah!" "What is the price?" she asked again.

"The price is all right, and we are going to try the experiment."

"Are we though?" said she, between doubt and desire.

"Most assuredly; it will be a saving in the end. I shall write to Harrison Ely this very night."

The return mail brought me a reply stating that two Electric Automatic Household Beneficent Geniuses had been shipped me by express. The letter enclosed a pamphlet that gave a more particular account of the E. A. H. B. G. than the circulars contained. My friend's invention was shaped in the likeness of the human figure, with body, head, arms, legs, hands and feet. It was clad in waterproof cloth, with a hood of the same to protect the head, and was shod with felt. The trunk contained the wheels and springs, and in the head was fixed the electric battery. The face, of bisque, was described as possessing "a very natural and pleasing expression."

Just at dusk an oblong box arrived by express and was duly delivered in our hall, but at my wife's urgent entreaty I consented not to unpack the machines until next day.

"If we should not get the knack of managing them, they might give us trouble," said this wise wife of mine. I agreed to this, and having sent away Bridget with a week's wages, to the satisfaction of all parties, we went to bed in high hopes.

Early next morning we were astir.

"My dear," I said, "do not give yourself the least concern about breakfast; I am determined that Harrison's invention shall have fair play."

"Very well," my wife assented; but she prudently administered bread and butter to her offspring.

I opened the oblong box, where lay the automatons side by side, their hands placidly folded upon their waterproof breasts, and their eyes looking

placidly expectant from under their waterproof hoods.

I confess the sight gave me a shock. Anna Maria turned pale; the children hid their faces in her skirts.

"Once out of the box," I said to myself, "and the horror will be over."

The machines stood on their feet admirably, but the horror was not materially lessened by this change of position. However, I assumed a bold front, and said, jocosely:

"Now, which is Bridget, and which is Juliana—which the cook, and which the housemaid?"

This distinction was made clear by dial plates and indicators, set conspicuously between the shoulders, an opening being cut in the waterproof for that purpose. The housemaid's dial plate was stamped around the circumference with the words: Bed, Broom, Duster, Door Bell, Dining Room Service, Parlor Service, etc. In like manner, the cook's dial plate bore the words that pertained to her department. I gave myself first to "setting" the housemaid, as being the simpler of the two.

"Now, my dear," said I, confidently, "we shall see how *this* Juliana can make the beds."

I proceeded, according to the pamphlet's directions, to point the indicator to the word "Bed." Next, as there were three beds to be made, I pushed in three of the five little red points surrounding the word. Then I set the "clock" connected with the indicator, for a thirty minutes' job, thinking it might take about ten minutes to a bed. I did not consult my wife, for women do not understand machinery, and any suggestion of hesitancy on my part would have demoralized her.

The last thing to be done was to connect the indicator with the battery, a simple enough performance in itself, but the pamphlet of directions gave a repeated and red-lettered "CAUTION," never to interfere with the machine while it was at work! I therefore issued the Command, "Non-combatants to the rear!" and was promptly obeyed.

What happened next I do not pretend to account for. By what subtle and mysterious action of electricity, by what unerring affinity, working through a marvellous mechanism, that Electric Automatic Household Beneficent Genius, whom—or which, for short—we called Juliana, sought its appropriate task, is the inventor's secret. I don't undertake to explain, I merely narrate. With a "click" the connection was made, and the new Juliana *went upstairs* at a brisk and business-like pace.

We followed in breathless amazement. In less than five minutes, bed number one was made, and in a twinkling the second was taken in hand, and number three also was fairly accomplished, long before the allotted thirty minutes had expired. By this time, familiarity had somewhat dulled that awe and wonder with which we had gaped upon the first performance, and I beheld a smile of hopeful satisfaction on my wife's anxious countenance.

Our youngest, a boy aged three, was quick to feel the genial influence of this smile, and encouraged thereby, he bounced into the middle of the first bed. Hardly had he alighted there, when our automaton, having finished making the third bed, returned to her first job, and, before we could imagine mischief, the mattresses were jerked about, and the child was tumbled, headforemost on the floor!

Had the flesh-and-blood Juliana been guilty of such an act, she should have been dismissed on the spot; but, as it was, no one of us ventured so much as a remonstrance. My wife lifted the screaming child, and the imperturbable machine went on to readjust the bed with mechanical exactitude.

At this point a wild shout of mingled exultation, amazement and terror arose from below, and we hastened downstairs to find our son John hugging his elbows and capering frantically in front of the kitchen door, where the electric cook was stirring empty nothing in a pan, with a zeal worthy a dozen eggs.

My eldest hopeful, impelled by that spirit of enterprise and audacity characteristic of nine-year-old boys, had ventured to experiment with the kitchen automaton, and by sheer accident had effected a working connection between the battery and the indicator, and the machine, in "going off," had given the boy a blow that made him feel, as he expressed it, "like a funny-bone all over."

"And served you right!" cried I. The thing was set for an hour and a half of work, according to the showing of the dial plate, and no chance to stop it before I must leave for my office. Had the materials been supplied, we might have had breakfast; but, remembering the red-lettered "CAUTION," we dared not supply materials while that indefatigable spoon was gyrating in the empty pan. For my distraction, Kitty, my daughter of seven years, now called to me from upstairs:

"Papa, you *better* come, quick! *It's a-tearin' up these beds!*"

"My dear," I sighed, "there's no way to stop it. We'll have to wait for the

works to run down. I must call Harrison's attention to this defect. He ought to provide some sort of brake."

We went upstairs again. The B. G. Juliana stood beside the bed which she had just torn up for the sixth or seventh time, when suddenly she became, so to speak, paralyzed; her arms, in the act of spreading the sheets, dropped by her sides, her back stiffened, and she stood absolutely motionless, leaving her job unfinished—the B. G. would move no more until duly "set" again.

I now discovered that I was hungry. "If that Fiend in the kitchen were only at work about something substantial, instead of whipping the air into imaginary omelettes!" I groaned.

"Never mind," said my wife; "I've a pot of coffee on the kerosene stove."

Bless her! She was worth a thousand Beneficent Geniuses, and so I told her.

I did not return until late, but I was in good spirits, and I greeted my wife gayly:

"Well, how do they work?"

"*Like fiends!*" my usually placid helpmeet replied, so vehemently that I was alarmed. "They flagged at first," she proceeded, excitedly, "and I oiled them, which I am not going to do, ever again. According to the directions, I poured the oil down their throats. It was horrible! They seemed to me to *drink it greedily.*"

"Nonsense! That's your imagination."

"Very well," said Anna Maria. "You can do the oiling in future. They took a good deal this morning; it wasn't easy to stop pouring it down. And they worked—*obstreperously*. That Fiend in the kitchen has cooked all the provisions I am going to supply *this* day, but still she goes on, and it's no use to say a word."

"Don't be absurd," I remonstrated. "The thing is only a machine."

"I'm not so sure about that!" she retorted. "As for the other one—I set it sweeping, and it is sweeping still!"

We ate the dinner prepared by the kitchen Fiend, and really, I was tempted to compliment the cook in a set speech, but recollected myself in time to spare Anna Maria the triumph of saying, "I told you so!"

Now, that John of mine, still in pursuit of knowledge, had spent the day studying Harrison Ely's pamphlet, and he learned that the machines could be set, like an alarm clock, for any given hour. Therefore, as soon as the Juliana



had collapsed over a pile of dust in the middle of the hall, John, unknown to us, set her indicator to the broom handle for seven o'clock the following morning. When the Fiend in the kitchen ran down, leaving everything in confusion, my much-tried wife persuaded me to give my exclusive attention to that machine, and the Juliana was put safely in a corner. Thus it happened that John's interference escaped detection. I set Bridget's indicator for kitchen-cleaning at seven-thirty the next morning.

"When we understand them better," I said to my wife, "we will set their morning tasks for an earlier hour, but we won't put it too early now, since we must first learn their ways."

"That's the trouble with all new servants," said Anna Maria.

The next morning at seven-thirty, precisely, we were awakened by a commotion in the kitchen.

"By George Washington!" I exclaimed. "The Thing's on time!"

I needed no urging to make me forsake my pillow, but Anna Maria was ahead of me.

"Now, my dear, don't get excited," I exhorted, but in vain.

"Don't you hear?" she whispered, in terror. "*The other one!*—swe—eep—ing!" And she darted from the room.

I paused to listen, and heard the patter of three pairs of little bare feet across the hall upstairs. The children were following their mother. The next sound I heard was like the dragging of a rug along the floor. I recognized this peculiar sound as the footsteps of the B. G. Then came a dull thud, mingled with a shout from Johnnie, a scream from my wife, and the terrified cries of the two younger children. I rushed out just in time to see John, in his nightclothes, with his hair on end, tear downstairs like a streak of lightning. My little Kitty and the three-year-old baby stood clasped in each other's arms at the head of the stairs, sobbing in terror, and, halfway down, was my wife, leaning over the railing, with ashen face and rigid body, her fascinated gaze fixed upon a dark and struggling mass in the hall below.

John, when he reached the bottom of the stairs, began capering like a goat gone mad, digging the floor with his bare heels, clapping his hands with an awful glee, and shouting:

"Bet your bottom dollar on the one that whips!"

The Juliana and the Bridget were fighting for the broom!

I comprehended the situation intuitively. The kitchen-cleaning, for which the Fiend had been "set," had reached a point that demanded the

broom, and that subtle, attractive affinity, which my friend's genius had known how to produce, but had not learned to regulate, impelled the unerring automaton towards the only broom in the house, which was now in the hands of its fellow automaton, and a struggle was inevitable. What I could not understand—Johnnie having kept his own counsel—was this uncontrollable sweeping impulse that possessed the Juliana.

However, this was no time for investigating the exact cause of the terrific row now going on in our front hall. The Beneficent Geniuses had each a firm grip of the broom handle, and they might have performed the sweeping very amicably together, could they but have agreed as to the field of labor, but their conflicting tendencies on this point brought about a rotary motion that sent them spinning around the hall, and kept them alternately cracking each other's head with a violence that ought to have drawn blood. Considering their life-likeness, we should hardly have thought it strange if blood *had* flowed, and it would have been a relief had the combatants but called each other names, so much did their dumbness intensify the horror of a struggle, in the midst of which the waterproof hoods fell off, revealing their startlingly human countenances, not distorted by angry passions, but resolute, inexorable, calm, as though each was sustained in the contest by a lofty sense of duty.

"They're alive! Kill 'em! Kill 'em, quick!" shrieked my wife, as the gyrating couple moved towards the staircase.

"Let 'em alone," said Johnnie—his sporting blood, which he inherits from his father, thoroughly roused—dancing about the automatic pugilists in delight, and alternately encouraging the one or the other to increased efforts.

Thus the fight went on with appalling energy and reckless courage on both sides, my wife wringing her hands upon the staircase, our infants wailing in terror upon the landing above, and I wavering between an honest desire to see fair play and an apprehensive dread of consequences which was not unjustified.

In one of their frantic gyrations the figures struck the hat rack and promptly converted it into a mass of splinters. In a minute more they became involved with a rubber plant—the pride of my wife's heart—and distributed it impartially all over the premises. From this they caromed against the front door, wrecking both its stained glass panes, and then down the length of the hall they sped again, fighting fiercely and dealing one another's imperturbable countenances ringing blows with the disputed broom.

We became aware through Johnnie's excited comments, that Juliana had lost an ear in the fray, and presently it was discernible that a fractured nose had somewhat modified the set geniality of expression that had distinguished Bridget's face in its prime.

How this fierce and equal combat would have culminated if further prolonged no one but Harrison Ely can conjecture, but it came to an abrupt termination as the parlor clock chimed eight, the hour when the two automatons should have completed their appointed tasks.

Though quite late at my office that morning, I wired Ely before attending to business. Long-haired, gaunt and haggard, but cheerful as ever, he arrived next day, on fire with enthusiasm. He could hardly be persuaded to refresh himself with a cup of coffee before he took his two recalcitrant Geniuses in hand. It was curious to see him examine each machine, much as a physician would examine a patient. Finally his brow cleared, he gave a little puff of satisfaction, and exclaimed:

"Why, man alive, there's nothing the matter—not a thing! What you consider a defect is really a merit—merely a surplus of mental energy. They've had too big a dose of oil. Few housekeepers have any idea about proper lubrication," and he emitted another little snort, at which my wife colored guiltily.

"I see just what's wanted," he resumed. "The willpower generated and not immediately expended becomes cumulative and gets beyond control. I'll introduce a little compensator, to take up the excess and regulate the flow. Then a child can operate them."

It was now Johnnie's turn to blush.

"Ship 'em right back to the factory, and we'll have 'em all right in a few days. I see where the mechanism can be greatly improved, and when you get 'em again I know you'll never consent to part with 'em!"

That was four months ago. The "Domestic Fairies" have not yet been returned from Harrison's laboratory, but I am confidently looking for the familiar oblong packing case, and expect any day to see in the papers the prospectus of the syndicate which Ely informs me is being "promoted" to manufacture his automatic housemaid.

# Shadows in the Valley

"The Dancing Partner"

"The Artificial Mother"

"Moxon's Master"

In the same years that multiple writers were considering the comic potential of automaton servants, others had turned their attentions to distinctly horrific possibilities.

"The Dancing Partner" by Jerome K. Jerome (1859–1927) starts similarly to one of the humorous stories. Indeed, Jerome (also the editor of *The Idler*) was mostly noted for his comic novel *Three Men in a Boat*. Geibel, the inventor in this tale, overhears his daughter talking to friends about how ridiculous young men are; all the girls really want is a good dancer. Wouldn't it be fine to simply have a clockwork man to dance with? Geibel creates one, but while the manhandling of ne'er-do-wells and burglars was treated lightly in other stories, the fate of the young lady dancing with an out of control machine is grim. "The Dancing Partner" was originally published in 1893 as part of Jerome's *Novel Notes*, a collection of stories with a wrap-around narrative.

In 1894, George Haven Putnam (1844–1930, of G. P. Putnam's Sons) published "The Artificial Mother." The story firmly straddles the lightness of the previous section and the darkness of its companions here, with more than a dash of cynicism over the state of family obligations. Our narrator bemoans being the father of nine children. His impetus to build a helper for his wife stems from feeling supplanted in his wife's affections and a desire to prove that mothering can be done without a woman.

The automaton chess player is given one more treatment (in this volume, at least) in "Moxon's Master." Ambrose Bierce (1842–1914?) picked up the mantle of dark romanticism where Poe let it fall and, as a Civil War veteran, gave many of his stories a distinctly American feel. The majority of "Moxon's Master" dwells upon existential questions of the nature of being, much like some chapters of Samuel Butler's 1872 *Erewhon* does. While the narrator of "Moxon" doesn't entirely come to a philosophical conclusion, the

finale of the story involves a chess-player much less passive than Kempelen's Turk. The story was first published in *The San Francisco Examiner*.



# "The Dancing Partner"

an excerpt from *Novel Notes*

Jerome K. Jerome

(1893)

"This story," commenced MacShaughnassy, "comes from Furtwangen, a small town in the Black Forest. There lived there a very wonderful old fellow named Nicholaus Geibel. His business was the making of mechanical toys, at which work he had acquired an almost European reputation. He made rabbits that would emerge from the heart of a cabbage, flap their ears, smooth their whiskers, and disappear again; cats that would wash their faces, and mew so naturally that dogs would mistake them for real cats, and fly at them; dolls, with phonographs concealed within them, that would raise their hats and say, 'Good morning; how do you do?' and some that would even sing a song.

"But he was something more than a mere mechanic; he was an artist. His work was with him a hobby, almost a passion. His shop was filled with all manner of strange things that never would, or could, be sold—things he had made for the pure love of making them. He had contrived a mechanical donkey that would trot for two hours by means of stored electricity, and trot, too, much faster than the live article, and with less need for exertion on the part of the driver; a bird that would shoot up into the air, fly round and round in a circle, and drop to earth at the exact spot from where it started; a skeleton that, supported by an upright iron bar, would dance a hornpipe; a life-size lady doll that could play the fiddle; and a gentleman with a hollow inside who could smoke a pipe and drink more lager beer than any three average German students put together, which is saying much.

"Indeed, it was the belief of the town that old Geibel could make a man capable of doing everything that a respectable man need want to do. One day he made a man who did too much, and it came about in this way.

"Young Doctor Follen had a baby, and the baby had a birthday. Its first birthday put Doctor Follen's household into somewhat of a flurry, but on the occasion of its second birthday, Mrs. Doctor Follen gave a ball in honour of

the event. Old Geibel and his daughter Olga were among the guests.

"During the afternoon of the next day, some three or four of Olga's bosom friends, who had also been present at the ball, dropped in to have a chat about it. They naturally fell to discussing the men, and to criticising their dancing. Old Geibel was in the room, but he appeared to be absorbed in his newspaper, and the girls took no notice of him.

"There seem to be fewer men who can dance, at every ball you go to,' said one of the girls.

"Yes, and don't the ones who can, give themselves airs,' said another; 'they make quite a favour of asking you.'

"And how stupidly they talk,' added a third. 'They always say exactly the same things: "How charming you are looking tonight." "Do you often go to Vienna? Oh, you should, it's delightful." "What a charming dress you have on." "What a warm day it has been." "Do you like Wagner?" I do wish they'd think of something new.'

"Oh, I never mind how they talk,' said a fourth. 'If a man dances well he may be a fool for all I care.'

"He generally is,' slipped in a thin girl, rather spitefully.

"I go to a ball to dance,' continued the previous speaker, not noticing the interruption. 'All I ask of a partner is that he shall hold me firmly, take me round steadily, and not get tired before I do.'

"A clockwork figure would be the thing for you,' said the girl who had interrupted.

"Bravo!' cried one of the others, clapping her hands, 'what a capital idea!'

"What's a capital idea?' they asked.

"Why, a clockwork dancer, or, better still, one that would go by electricity and never run down.'

"The girls took up the idea with enthusiasm.

"Oh, what a lovely partner he would make,' said one; 'he would never kick you, or tread on your toes.'

"Or tear your dress,' said another.

"Or get out of step.'

"Or get giddy and lean on you.'

"And he would never want to mop his face with his handkerchief. I do hate to see a man do that after every dance.'

"And wouldn't want to spend the whole evening in the supper-room.'

"'Why, with a phonograph inside him to grind out all the stock remarks, you would not be able to tell him from a real man,' said the girl who had first suggested the idea.

"'Oh yes, you would,' said the thin girl, 'he would be so much nicer.'

"Old Geibel had laid down his paper, and was listening with both his ears. On one of the girls glancing in his direction, however, he hurriedly hid himself again behind it.

"After the girls were gone, he went into his workshop, where Olga heard him walking up and down, and every now and then chuckling to himself; and that night he talked to her a good deal about dancing and dancing men—asked what they usually said and did—what dances were most popular—what steps were gone through, with many other questions bearing on the subject.

"Then for a couple of weeks he kept much to his factory, and was very thoughtful and busy, though prone at unexpected moments to break into a quiet low laugh, as if enjoying a joke that nobody else knew of.

"A month later another ball took place in Furtwangen. On this occasion it was given by old Wenzel, the wealthy timber merchant, to celebrate his niece's betrothal, and Geibel and his daughter were again among the invited.

"When the hour arrived to set out, Olga sought her father. Not finding him in the house, she tapped at the door of his workshop. He appeared in his shirtsleeves, looking hot, but radiant.

"'Don't wait for me,' he said, 'you go on, I'll follow you. I've got something to finish.'

"As she turned to obey he called after her, 'Tell them I'm going to bring a young man with me—such a nice young man, and an excellent dancer. All the girls will like him.' Then he laughed and closed the door.

"Her father generally kept his doings secret from everybody, but she had a pretty shrewd suspicion of what he had been planning, and so, to a certain extent, was able to prepare the guests for what was coming. Anticipation ran high, and the arrival of the famous mechanist was eagerly awaited.

"At length the sound of wheels was heard outside, followed by a great commotion in the passage, and old Wenzel himself, his jolly face red with excitement and suppressed laughter, burst into the room and announced in stentorian tones:

"'Herr Geibel—and a friend.'



"Herr Geibel and his 'friend' entered, greeted with shouts of laughter and applause, and advanced to the centre of the room.

"'Allow me, ladies and gentlemen,' said Herr Geibel, 'to introduce you to my friend, Lieutenant Fritz. Fritz, my dear fellow, bow to the ladies and gentlemen.'

"Geibel placed his hand encouragingly on Fritz's shoulder, and the lieutenant bowed low, accompanying the action with a harsh clicking noise in his throat, unpleasantly suggestive of a death rattle. But that was only a detail.

"'He walks a little stiffly' (old Geibel took his arm and walked him forward a few steps. He certainly did walk stiffly), 'but then, walking is not his forte. He is essentially a dancing man. I have only been able to teach him the waltz as yet, but at that he is faultless. Come, which of you ladies may I introduce him to, as a partner? He keeps perfect time; he never gets tired; he won't kick you or tread on your dress; he will hold you as firmly as you like, and go as quickly or as slowly as you please; he never gets giddy; and he is full of conversation. Come, speak up for yourself, my boy.'

"The old gentleman twisted one of the buttons of his coat, and immediately Fritz opened his mouth, and in thin tones that appeared to proceed from the back of his head, remarked suddenly, 'May I have the pleasure?' and then shut his mouth again with a snap.

"That Lieutenant Fritz had made a strong impression on the company was undoubted, yet none of the girls seemed inclined to dance with him. They looked askance at his waxen face, with its staring eyes and fixed smile, and shuddered. At last old Geibel came to the girl who had conceived the idea.

"'It is your own suggestion, carried out to the letter,' said Geibel, 'an electric dancer. You owe it to the gentleman to give him a trial.'

"She was a bright saucy little girl, fond of a frolic. Her host added his entreaties, and she consented.

"Herr Geibel fixed the figure to her. Its right arm was screwed round her waist, and held her firmly; its delicately jointed left hand was made to fasten itself upon her right. The old toymaker showed her how to regulate its speed, and how to stop it, and release herself.

"'It will take you round in a complete circle,' he explained; 'be careful that no one knocks against you, and alters its course.'

"The music struck up. Old Geibel put the current in motion, and

Annette and her strange partner began to dance.

"For a while every one stood watching them. The figure performed its purpose admirably. Keeping perfect time and step, and holding its little partner tightly clasped in an unyielding embrace, it revolved steadily, pouring forth at the same time a constant flow of squeaky conversation, broken by brief intervals of grinding silence.

"How charming you are looking tonight,' it remarked in its thin, far-away voice. 'What a lovely day it has been. Do you like dancing? How well our steps agree. You will give me another, won't you? Oh, don't be so cruel. What a charming gown you have on. Isn't waltzing delightful? I could go on dancing forever—with you. Have you had supper?'

"As she grew more familiar with the uncanny creature, the girl's nervousness wore off, and she entered into the fun of the thing.

"Oh, he's just lovely,' she cried, laughing, 'I could go on dancing with him all my life.'

"Couple after couple now joined them, and soon all the dancers in the room were whirling round behind them. Nicholas Geibel stood looking on, beaming with childish delight at his success.

"Old Wenzel approached him, and whispered something in his ear. Geibel laughed and nodded, and the two worked their way quietly towards the door.

"This is the young people's house tonight,' said Wenzel, as soon as they were outside; 'you and I will have a quiet pipe and a glass of hock, over in the counting house.'

"Meanwhile the dancing grew more fast and furious. Little Annette loosened the screw regulating her partner's rate of progress, and the figure flew round with her swifter and swifter. Couple after couple dropped out exhausted, but they only went the faster, till at length they were the only pair left dancing.

"Madder and madder became the waltz. The music lagged behind: the musicians, unable to keep pace, ceased, and sat staring. The younger guests applauded, but the older faces began to grow anxious.

"Haden't you better stop, dear,' said one of the women, 'You'll make yourself so tired.'

"But Annette did not answer.

"I believe she's fainted,' cried out a girl, who had caught sight of her face as it was swept by.

"One of the men sprang forward and clutched at the figure, but its impetus threw him down on to the floor, where its steel-cased feet laid bare his cheek. The thing evidently did not intend to part with its prize easily.

"Had any one retained a cool head, the figure, one cannot help thinking, might easily have been stopped. Two or three men, acting in concert, might have lifted it bodily off the floor, or have jammed it into a corner. But few human heads are capable of remaining cool under excitement. Those who are not present think how stupid must have been those who were; those who are, reflect afterwards how simple it would have been to do this, that, or the other, if only they had thought of it at the time.

"The women grew hysterical. The men shouted contradictory directions to one another. Two of them made a bungling rush at the figure, which had the result of forcing it out of its orbit in the centre of the room, and sending it crashing against the walls and furniture. A stream of blood showed itself down the girl's white frock, and followed her along the floor. The affair was becoming horrible. The women rushed screaming from the room. The men followed them.

"One sensible suggestion was made: 'Find Geibel—fetch Geibel.'

"No one had noticed him leave the room, no one knew where he was. A party went in search of him. The others, too unnerved to go back into the ballroom, crowded outside the door and listened. They could hear the steady whir of the wheels upon the polished floor, as the thing spun round and round; the dull thud as every now and again it dashed itself and its burden against some opposing object and ricocheted off in a new direction.

"And everlastingly it talked in that thin ghostly voice, repeating over and over the same formula: 'How charming you are looking tonight. What a lovely day it has been. Oh, don't be so cruel. I could go on dancing forever—with you. Have you had supper?'

"Of course they sought for Geibel everywhere but where he was. They looked in every room in the house, then they rushed off in a body to his own place, and spent precious minutes in waking up his deaf old housekeeper. At last it occurred to one of the party that Wenzel was missing also, and then the idea of the counting house across the yard presented itself to them, and there they found him.

"He rose up, very pale, and followed them; and he and old Wenzel forced their way through the crowd of guests gathered outside, and entered the room, and locked the door behind them.

"From within there came the muffled sound of low voices and quick steps, followed by a confused scuffling noise, then silence, then the low voices again.

"After a time the door opened, and those near it pressed forward to enter, but old Wenzel's broad shoulders barred the way.

"'I want you—and you, Bekler,' he said, addressing a couple of the elder men. His voice was calm, but his face was deadly white. 'The rest of you, please go—get the women away as quickly as you can.'

"From that day old Nicholas Geibel confined himself to the making of mechanical rabbits and cats that mewed and washed their faces."

We agreed that the moral of MacShaughnassy's story was a good one.

# **"The Artificial Mother"**

A Marital Fantasy

George Haven Putnam  
(1894)

"No," I said, "I can't stand this any longer. I might as well have no wife at all as to have one who, instead of belonging to me, her lawful lord and master, is at the beck and call of sundry small specimens of humanity, to whose remorseless tyranny she yields the implicit and uncomplaining obedience of the most abject slave!"

Numbers eight and nine of our little family circle had arrived together, and, sturdy little fellows that they were, had recognized the situation at a glance, had deposed number seven from her position of supremacy, and had set up a despotism over their mother and the household, perhaps the most unmerciful that had as yet been experienced.

It will be apparent, from this preliminary word, that I am a married man, sufficiently so, the superficial reader may imagine. But it is precisely my complaint that, while my opportunities for the development of my parental qualities are unsurpassed, my married life, as far as the society of my wife is concerned, does not amount to—well, the value of a Confederate dollar.

If, going "fair shares" with my progeny, I had been permitted to put in a claim for say an even tenth of her attention, I should have nothing to say. But those ogres of children pull her to pieces in small mouthfuls through the twenty-four hours between their nine voracious selves, without giving me a chance for even a thirty-second nibble. In giving them their classification in the animal kingdom, I should, I think, place them under the head of "Pollypophagi," or "Mother-devourers."

I was just beginning to console myself with the thought that before number one became old enough to sit up evenings, number seven would learn to go to sleep before midnight, when numbers eight and nine arrived, as I said, "all in a heap," and deranged my calculations. "No," I said, for perhaps the 999th time, as the maternal slave, after eliminating one and two in a flood

of disgrace and tears (that gave them the appearance of a compound waterspout), tucking up three, four, and five, who were accidentally good, and turning over to me the cradles containing six and seven, with injunctions to "keep them stirring," rushed off to obey the vociferous calls of the despots in chief, the two latest arrivals, "it won't do."

"Polly," I asked, as she returned, a little out of breath, with a red-faced tyrant under each arm, "What do those ('wretches,' I was going to say, but fortunately checked myself in time) *young gentlemen* want?"

"Why, a little motherly affection, to be sure," she answered, commencing to "croon" to them in the language peculiar to mothers and babydom. "They want *me*."

"Bosh," I rejoined. "They want merely something soft to touch, a swinging motion to addle their brains (if they have any), and a monotonous din in their ears, and they would be just as well satisfied if these were supplied by a steam engine as by their mother. It is all nonsense to talk of babies having affection. You might as well believe in their Calvinism, or transcendentalism, or any other product of later life."

Polly, however, was too absorbed in the "crooning" process to listen to my insinuations, and the beginning of a growl in one of the cradles at my feet recalled me to my own duty. But while I worked I pondered. The word uttered in jest remained in my mind. "*A steam engine!*" Yes ! Why not ? Or an engine of some kind to perform at least this routine labor of keeping the young savages at rest by keeping them in motion. Something steady, and soft, and swinging, and "crooning." Pshaw ! Science had solved worse problems than this. It is simply the construction of an "Artificial Mother." The thing is possible, and it shall be done ! I gave my cradle a kick of malicious satisfaction, that evoked from number seven a roar of rebellious protest, and then absorbed myself in the fascination of the thought.

On my way to business the next morning, I called at the studio of an artist friend to see a new picture, and my eye rested on a lay-figure, standing, gracefully draped, in one corner. It flashed across me that this was just what I wanted, and I persuaded my friend to spare it to me for a time for some work I myself had in hand.

I did not want to startle Polly or to arouse prematurely the suspicions of the twins, so I carried the figure up into a disused garret, and devoted all the spare hours of the ensuing week to experimenting upon her. She was, fortunately for my purpose, of the finest Paris make, steel-sprung, and

double extra-jointed, and there was question merely of supplying the inward power ("true inwardness") and the outward appurtenances.

I will not weary my readers with all the details of my labors. I became so absorbed in my task that I could hardly give thought to anything else. My business suffered, and my wife complained that my face was getting a vacant stare upon it and she thought I was spending too many hours at that horrid club. It is sufficient to say that after various ineffectual experiments with steam, compressed air, and electricity, I at length succeeded in placing in the body of my lay woman a clockwork combination which, by a series of spiral connections with the head, arms, and shoulders, moved these in a uniform swing, timed to coincide with that of the rocking chair in which I had placed her. The periodicity and harmony of the movements were perfect, and I even flattered myself that there was some special grace in the upward sweep of the arms, and quite a motherly effect to the downward bend of the head.

But the crowning triumph of my labors was the duplex "*crooning attachment*" by means of which was generated the necessary "*rumble jumble*" (with those monotonous sounds I was only too familiar), which came streaming out of the mouth in an unbroken succession that nothing but the action of the "safety stop-valve" could break off.

This part of my "mother" cost me much care and anxiety, for I knew that unless this could be made a success, all her other excellent qualities would go for nothing. My mechanical readers will easily guess the principle of the "attachment." A series of diminutive organ tubes were arranged in the chest, the valves of which worked by clock springs, while the sound was conducted through a larynx, (delicately constructed from a turkey's gizzard) to the mouth. The first attempt with the combination produced only a series of unearthly gasps, at the bottom of which I thought I detected the ghost of a gobble, but a little modification of the valves, the treatment of the gizzard with a weak solution of aqua regia, which softened away all its harsh reminiscences, and the interposition between this and the tubes of a pair of miniature drum heads (made of mouse-skin) as *reverberators* of the sound, gave me the happy result of a complete series of "croon waves." I was able also finally to arrange these in three sets of chords, so that the crooning could be made *piano*, *andante*, or *furiossissimo* according to the age, condition, or degree of obstreperousness, of the infant being operated upon.

Of course, the clockwork upon which the crooning depended was entirely distinct from the system controlling the movements of the body,

being of necessity much more complex and delicate, as supplying what might be termed the "brain power" of the creature. When I noticed the precision with which my safety stop-valve worked, bringing the most furious croon-waves to a complete stop within the tenth of a second, I could not help longing that its application could be extended beyond the range of *artificial* mothers. What an ideal domestic existence would be that in which the natural article could be brought to a safe stop within the tenth of a second!

It now remained only to put the finishing touches on my "mother" in completing her attire and adornments. I gave careful attention to the details of these, for I knew that those twins were very sharp fellows, and I did not propose to give them any ground for irreverence or even for criticism in the appearance of the lady who was to stand to them *in loco matris*. One of Polly's nursery gowns, with the color of which the twins were perfectly familiar, was skilfully abstracted from her wardrobe, and gracefully draped round the "mother," whose arms and breast had first been carefully padded.

The face was delicately touched up by my artist friend (whom I had finally been obliged to take into my confidence), until it wore an air of maternal affection and solicitude almost surpassing that of the original ; and the hair (which was one of the more expensive items of my purchased paraphernalia) was arranged as nearly as possible in the regular "disarrangement" to which the babies were accustomed. This I found difficult to effect without impairing the safety of the fastenings, and I dreaded somewhat the chance of one of the twins in an enterprising moment giving a grab at the "light ringlet just sweeping his face," but it was a risk that had to be incurred.

And now she was complete, and my heart beat high with a sense of triumph and expectation, while visions came before me of the time when, with a whole team of "artificial mothers" crooning peace and comfort through the house, Polly and I could roam away in blissful idleness and renew the days of our youth.

A carefully prepared rag-baby was laid in the arms of the expectant mother, the two sets of works were wound up, the starting spring touched, and the rocking and fondling and crooning commenced, with such perfect naturalness, grace, and harmony that I was carried away by my delight, and caught myself saying, "My dear, you are a grand success, and reflect credit on your maker."

I put on the stops, and the baby dropped with an easy motion of the



arms into the "mother's" lap, the crooning softened down into the gentle murmur of the "piano," then ceased altogether, and the mother sat looking at her sleeping child with an aspect of such calm dignity and sweet motherliness that I was irresistibly impelled to give her a kiss of husbandly approval.

"What would Polly say?" I thought, as I wiped from my lips the slight touch left on them by the damp paint. Removing the rag-baby, I lifted with some effort the chair containing my handiwork down to the door of my parlor, which, since the advent of the twins, had been appropriated by them as a special private nursery, where my occasional presence was permitted only on sufferance.

The moment seemed propitious for my experiment. I could hear the twins yelling with vociferous indignation for their slave Polly, who had evidently been called into the farther nursery by some outbreak among their predecessors. I opened the door, placed the rocking chair cosily in front of the fire, smoothed down the drapery and loosened out the hair of its occupant, and gently laid a twin in each arm. A touch on the springs, and the arms moved up, clasping the little clamorous infants to her breast; the head bent over, the feet touched the floor, impelling the chair with a uniform swing, and with an equally uniform monotony the steady waves of the "crooning" poured forth from her lips.

The twins hushed their angry complaining and looked up inquiringly at the being to whom their destiny (in the shape of their father) had confided them. It was a moment of terrible suspense. If their keen perceptions discovered the fraud, if they decided that, in addition to the creature comforts of warmth and motion and noise, it was essential to their happiness to have also the *je ne sais quoi* of motherliness that my substitute could not bestow upon them, if (in the language of the day) their unsatisfied yearning revealed to them that their souls were not fed, and their sensibilities not ministered to, my beautiful theories would fall baseless to the ground, and my labor and hopes would indeed have been vain.

But no! Firmly held in the warm embrace of the untiring arms, evenly rocked in the steady swing of the chair, and dinned into unconsciousness by the unbroken stream of sound, they stilled their noisy complainings, accepted the situation, and relapsed into a state of blissful contentment and repose. It was evident that babies had no souls that needed ministering to, and that my "artificial mother" was a success. I threw myself into an easy-chair with the consciousness that I had done a great work for the world, for myself, for

Polly.

Just then I heard her step approaching. The sudden cessation of the wonted cries had alarmed her keen ear, and she came flying in, looking, with the flush of haste and alarm upon her face, especially pretty and charming.

"Our new nurse, my dear," I said, waving my hand towards the chair.

"A friend who has come in to lend a hand," I proceeded rather incoherently, seeing that Polly stood back with doubt, bewilderment, and vague apprehension.

"In short, my dear, my new *artificial mother*, I burst out in desperation, as she still stood and stared, while the rocking chair went on without ceasing, and the crooning started in on the higher key.

"Artificial what?" cried Polly. "Oh, Tom! what frightful experiments are you making with my blessed boys? Let me have them at once," she cried, rushing at the figure.

But the babies were but clutched the tighter, the chair swung more swiftly, and the "crooning" burst into a louder strain with what sounded like a defiant ring.

"Give me my children!" shrieked Polly, trying to check the ceaseless swing of the chair, but the "mother" continued imperturbable and only answered her vehemence with a bland, fixed smile.

"Tom, help me; the thing is a demon!" screamed Polly in desperation, pulling frantically at the "mother's" arms. But even as she spoke the swinging redoubled in velocity until the two babies grew black in the face, and seemed merged into one. The crooning burst into a savage roar, as if, indeed, a fiend had taken possession of my innocent "mother," and to my excited imagination it really seemed that her eyes flashed fire and her face assumed an expression of demoniacal malice.

Finally, with a ferocious tug, Polly succeeded in pulling the "mother" up from the chair. For a moment they stood facing each other, glaring at each other in rage and defiance until I could hardly tell which looked the more terrible of the two.

Then came a "whirr" and a snap, and with a frightful crashing together, and a last despairing "croon," the "mother" sank in fragments on the floor, shooting the two babies to the opposite ends of the room, like billiard balls from a carrom.

With the whirr and the crooning, and the crash still ringing in my ears, I woke up and found I had tipped over the cradle of number seven on top of

number six, and that the collision had produced a small pandemonium.

My "artificial mother" was a dream, but may I not hope also—a prophecy?

# "Moxon's Master"

Ambrose Bierce

(1899)

"Are you serious?—do you really believe that a machine thinks?"

I got no immediate reply; Moxon was apparently intent upon the coals in the grate, touching them deftly here and there with the fire poker till they signified a sense of his attention by a brighter glow. For several weeks I had been observing in him a growing habit of delay in answering even the most trivial of commonplace questions. His air, however, was that of preoccupation rather than deliberation: one might have said that he had "something on his mind."

Presently he said:

"What is a 'machine'? The word has been variously defined. Here is one definition from a popular dictionary: 'Any instrument or organization by which power is applied and made effective, or a desired effect produced.' Well, then, is not a man a machine? And you will admit that he thinks—or thinks he thinks."

"If you do not wish to answer my question," I said, rather testily, "why not say so?—all that you say is mere evasion. You know well enough that when I say 'machine' I do not mean a man, but something that man has made and controls."

"When it does not control him," he said, rising abruptly and looking out of a window, whence nothing was visible in the blackness of a stormy night. A moment later he turned about and with a smile said: "I beg your pardon; I had no thought of evasion. I considered the dictionary man's unconscious testimony suggestive and worth something in the discussion. I can give your question a direct answer easily enough: I do believe that a machine thinks about the work that it is doing."

That was direct enough, certainly. It was not altogether pleasing, for it tended to confirm a sad suspicion that Moxon's devotion to study and work in his machine shop had not been good for him. I knew, for one thing, that he suffered from insomnia, and that is no light affliction. Had it affected his mind? His reply to my question seemed to me then evidence that it had;

perhaps I should think differently about it now. I was younger then, and among the blessings that are not denied to youth is ignorance. Incited by that great stimulant to controversy, I said:

"And what, pray, does it think with—in the absence of a brain?"

The reply, coming with less than his customary delay, took his favorite form of counter-interrogation:

"With what does a plant think—in the absence of a brain?"

"Ah, plants also belong to the philosopher class! I should be pleased to know some of their conclusions; you may omit the premises."

"Perhaps," he replied, apparently unaffected by my foolish irony, "you may be able to infer their convictions from their acts. I will spare you the familiar examples of the sensitive mimosa, the several insectivorous flowers and those whose stamens bend down and shake their pollen upon the entering bee in order that he may fertilize their distant mates. But observe this. In an open spot in my garden I planted a climbing vine. When it was barely above the surface I set a stake into the soil a yard away. The vine at once made for it, but as it was about to reach it after several days I removed it a few feet. The vine at once altered its course, making an acute angle, and again made for the stake. This manoeuvre was repeated several times, but finally, as if discouraged, the vine abandoned the pursuit and ignoring further attempts to divert it traveled to a small tree, further away, which it climbed.

"Roots of the eucalyptus will prolong themselves incredibly in search of moisture. A well-known horticulturist relates that one entered an old drain pipe and followed it until it came to a break, where a section of the pipe had been removed to make way for a stone wall that had been built across its course. The root left the drain and followed the wall until it found an opening where a stone had fallen out. It crept through and following the other side of the wall back to the drain, entered the unexplored part and resumed its journey."

"And all this?"

"Can you miss the significance of it? It shows the consciousness of plants. It proves that they think."

"Even if it did—what then? We were speaking, not of plants, but of machines. They may be composed partly of wood—wood that has no longer vitality—or wholly of metal. Is thought an attribute also of the mineral kingdom?"

"How else do you explain the phenomena, for example, of

crystallization?"

"I do not explain them."

"Because you cannot without affirming what you wish to deny, namely, intelligent cooperation among the constituent elements of the crystals. When soldiers form lines, or hollow squares, you call it reason. When wild geese in flight take the form of a letter V you say instinct. When the homogeneous atoms of a mineral, moving freely in solution, arrange themselves into shapes mathematically perfect, or particles of frozen moisture into the symmetrical and beautiful forms of snowflakes, you have nothing to say. You have not even invented a name to conceal your heroic unreason."

Moxon was speaking with unusual animation and earnestness. As he paused I heard in an adjoining room known to me as his "machine shop," which no one but himself was permitted to enter, a singular thumping sound, as of some one pounding upon a table with an open hand. Moxon heard it at the same moment and, visibly agitated, rose and hurriedly passed into the room whence it came. I thought it odd that any one else should be in there, and my interest in my friend—with doubtless a touch of unwarrantable curiosity—led me to listen intently, though, I am happy to say, not at the keyhole. There were confused sounds, as of a struggle or scuffle; the floor shook. I distinctly heard hard breathing and a hoarse whisper which said "Damn you!" Then all was silent, and presently Moxon reappeared and said, with a rather sorry smile:

"Pardon me for leaving you so abruptly. I have a machine in there that lost its temper and cut up rough."

Fixing my eyes steadily upon his left cheek, which was traversed by four parallel excoriations showing blood, I said:

"How would it do to trim its nails?"

I could have spared myself the jest; he gave it no attention, but seated himself in the chair that he had left and resumed the interrupted monologue as if nothing had occurred:

"Doubtless you do not hold with those (I need not name them to a man of your reading) who have taught that all matter is sentient, that every atom is a living, feeling, conscious being. I do. There is no such thing as dead, inert matter: it is all alive; all instinct with force, actual and potential; all sensitive to the same forces in its environment and susceptible to the contagion of higher and subtler ones residing in such superior organisms as it may be brought into relation with, as those of man when he is fashioning it into an

instrument of his will. It absorbs something of his intelligence and purpose—more of them in proportion to the complexity of the resulting machine and that of its work.

"Do you happen to recall Herbert Spencer's definition of 'Life'? I read it thirty years ago. He may have altered it afterward, for anything I know, but in all that time I have been unable to think of a single word that could profitably be changed or added or removed. It seems to me not only the best definition, but the only possible one.

"'Life,' he says, 'is a definite combination of heterogeneous changes, both simultaneous and successive, in correspondence with external coexistences and sequences.'"

"That defines the phenomenon," I said, "but gives no hint of its cause."

"That," he replied, "is all that any definition can do. As Mill points out, we know nothing of cause except as an antecedent—nothing of effect except as a consequent. Of certain phenomena, one never occurs without another, which is dissimilar: the first in point of time we call cause, the second, effect. One who had many times seen a rabbit pursued by a dog, and had never seen rabbits and dogs otherwise, would think the rabbit the cause of the dog.

"But I fear," he added, laughing naturally enough, "that my rabbit is leading me a long way from the track of my legitimate quarry: I'm indulging in the pleasure of the chase for its own sake. What I want you to observe is that in Herbert Spencer's definition of 'life' the activity of a machine is included—there is nothing in the definition that is not applicable to it. According to this sharpest of observers and deepest of thinkers, if a man during his period of activity is alive, so is a machine when in operation. As an inventor and constructor of machines I know that to be true."

Moxon was silent for a long time, gazing absently into the fire. It was growing late and I thought it time to be going, but somehow I did not like the notion of leaving him in that isolated house, all alone except for the presence of some person of whose nature my conjectures could go no further than that it was unfriendly, perhaps malign. Leaning toward him and looking earnestly into his eyes while making a motion with my hand through the door of his workshop, I said:

"Moxon, whom have you in there?"

Somewhat to my surprise he laughed lightly and answered without hesitation:

"Nobody; the incident that you have in mind was caused by my folly in

leaving a machine in action with nothing to act upon, while I undertook the interminable task of enlightening your understanding. Do you happen to know that Consciousness is the creature of Rhythm?"

"O bother them both!" I replied, rising and laying hold of my overcoat. "I'm going to wish you good night; and I'll add the hope that the machine which you inadvertently left in action will have her gloves on the next time you think it needful to stop her."

Without waiting to observe the effect of my shot I left the house.

Rain was falling, and the darkness was intense. In the sky beyond the crest of a hill toward which I groped my way along precarious plank sidewalks and across miry, unpaved streets I could see the faint glow of the city's lights, but behind me nothing was visible but a single window of Moxon's house. It glowed with what seemed to me a mysterious and fateful meaning. I knew it was an uncurtained aperture in my friend's "machine shop," and I had little doubt that he had resumed the studies interrupted by his duties as my instructor in mechanical consciousness and the fatherhood of Rhythm. Odd, and in some degree humorous, as his convictions seemed to me at that time, I could not wholly divest myself of the feeling that they had some tragic relation to his life and character—perhaps to his destiny—although I no longer entertained the notion that they were the vagaries of a disordered mind. Whatever might be thought of his views, his exposition of them was too logical for that. Over and over, his last words came back to me: "Consciousness is the creature of Rhythm." Bald and terse as the statement was, I now found it infinitely alluring. At each recurrence it broadened in meaning and deepened in suggestion. Why, here, (I thought) is something upon which to found a philosophy. If consciousness is the product of rhythm all things are conscious, for all have motion, and all motion is rhythmic. I wondered if Moxon knew the significance and breadth of his thought—the scope of this momentous generalization; or had he arrived at his philosophic faith by the tortuous and uncertain road of observation?

That faith was then new to me, and all Moxon's expounding had failed to make me a convert; but now it seemed as if a great light shone about me, like that which fell upon Saul of Tarsus; and out there in the storm and darkness and solitude I experienced what Lewes calls "The endless variety and excitement of philosophic thought." I exulted in a new sense of knowledge, a new pride of reason. My feet seemed hardly to touch the earth; it was as if I were uplifted and borne through the air by invisible wings.



Yielding to an impulse to seek further light from him whom I now recognized as my master and guide, I had unconsciously turned about, and almost before I was aware of having done so found myself again at Moxon's door. I was drenched with rain, but felt no discomfort. Unable in my excitement to find the doorbell I instinctively tried the knob. It turned and, entering, I mounted the stairs to the room that I had so recently left. All was dark and silent; Moxon, as I had supposed, was in the adjoining room—the "machine shop." Groping along the wall until I found the communicating door I knocked loudly several times, but got no response, which I attributed to the uproar outside, for the wind was blowing a gale and dashing the rain against the thin walls in sheets. The drumming upon the shingle roof spanning the unceiled room was loud and incessant.

I had never been invited into the machine shop—had, indeed, been denied admittance, as had all others, with one exception, a skilled metal worker, of whom no one knew anything except that his name was Haley and his habit silence. But in my spiritual exaltation, discretion and civility were alike forgotten and I opened the door. What I saw took all philosophical speculation out of me in short order.

Moxon sat facing me at the farther side of a small table upon which a single candle made all the light that was in the room. Opposite him, his back toward me, sat another person. On the table between the two was a chessboard; the men were playing. I knew little of chess, but as only a few pieces were on the board it was obvious that the game was near its close. Moxon was intensely interested—not so much, it seemed to me, in the game as in his antagonist, upon whom he had fixed so intent a look that, standing though I did directly in the line of his vision, I was altogether unobserved. His face was ghastly white, and his eyes glittered like diamonds. Of his antagonist I had only a back view, but that was sufficient; I should not have cared to see his face.

He was apparently not more than five feet in height, with proportions suggesting those of a gorilla—a tremendous breadth of shoulders, thick, short neck and broad, squat head, which had a tangled growth of black hair and was topped with a crimson fez. A tunic of the same color, belted tightly to the waist, reached the seat—apparently a box—upon which he sat; his legs and feet were not seen. His left forearm appeared to rest in his lap; he moved his pieces with his right hand, which seemed disproportionately long.

I had shrunk back and now stood a little to one side of the doorway and

in shadow. If Moxon had looked farther than the face of his opponent he could have observed nothing now, except that the door was open. Something forbade me either to enter or to retire, a feeling—I know not how it came—that I was in the presence of an imminent tragedy and might serve my friend by remaining. With a scarcely conscious rebellion against the indelicacy of the act I remained.

The play was rapid. Moxon hardly glanced at the board before making his moves, and to my unskilled eye seemed to move the piece most convenient to his hand, his motions in doing so being quick, nervous and lacking in precision. The response of his antagonist, while equally prompt in the inception, was made with a slow, uniform, mechanical and, I thought, somewhat theatrical movement of the arm, that was a sore trial to my patience. There was something unearthly about it all, and I caught myself shuddering. But I was wet and cold.

Two or three times after moving a piece the stranger slightly inclined his head, and each time I observed that Moxon shifted his king. All at once the thought came to me that the man was dumb. And then that he was a machine—an automaton chess-player! Then I remembered that Moxon had once spoken to me of having invented such a piece of mechanism, though I did not understand that it had actually been constructed. Was all his talk about the consciousness and intelligence of machines merely a prelude to eventual exhibition of this device—only a trick to intensify the effect of its mechanical action upon me in my ignorance of its secret?

A fine end, this, of all my intellectual transports—my "endless variety and excitement of philosophic thought!" I was about to retire in disgust when something occurred to hold my curiosity. I observed a shrug of the thing's great shoulders, as if it were irritated: and so natural was this—so entirely human—that in my new view of the matter it startled me. Nor was that all, for a moment later it struck the table sharply with its clenched hand. At that gesture Moxon seemed even more startled than I: he pushed his chair a little backward, as in alarm.

Presently Moxon, whose play it was, raised his hand high above the board, pounced upon one of his pieces like a sparrowhawk and with the exclamation "checkmate!" rose quickly to his feet and stepped behind his chair. The automaton sat motionless.

The wind had now gone down, but I heard, at lessening intervals and progressively louder, the rumble and roll of thunder. In the pauses between I

now became conscious of a low humming or buzzing which, like the thunder, grew momentarily louder and more distinct. It seemed to come from the body of the automaton, and was unmistakably a whirring of wheels. It gave me the impression of a disordered mechanism which had escaped the repressive and regulating action of some controlling part—an effect such as might be expected if a pawl should be jostled from the teeth of a ratchet wheel. But before I had time for much conjecture as to its nature my attention was taken by the strange motions of the automaton itself. A slight but continuous convulsion appeared to have possession of it. In body and head it shook like a man with palsy or an ague chill, and the motion augmented every moment until the entire figure was in violent agitation. Suddenly it sprang to its feet and with a movement almost too quick for the eye to follow shot forward across table and chair, with both arms thrust forth to their full length—the posture and lunge of a diver. Moxon tried to throw himself backward out of reach, but he was too late: I saw the horrible thing's hands close upon his throat, his own clutch its wrists. Then the table was overturned, the candle thrown to the floor and extinguished, and all was black dark. But the noise of the struggle was dreadfully distinct, and most terrible of all were the raucous, squawking sounds made by the strangled man's efforts to breathe. Guided by the infernal hubbub, I sprang to the rescue of my friend, but had hardly taken a stride in the darkness when the whole room blazed with a blinding white light that burned into my brain and heart and memory a vivid picture of the combatants on the floor, Moxon underneath, his throat still in the clutch of those iron hands, his head forced backward, his eyes protruding, his mouth wide open and his tongue thrust out; and—horrible contrast!—upon the painted face of his assassin an expression of tranquil and profound thought, as in the solution of a problem in chess! This I observed, then all was blackness and silence.

Three days later I recovered consciousness in a hospital. As the memory of that tragic night slowly evolved in my ailing brain recognized in my attendant Moxon's confidential workman, Haley. Responding to a look he approached, smiling.

"Tell me about it," I managed to say, faintly—"all about it."

"Certainly," he said; "you were carried unconscious from a burning house—Moxon's. Nobody knows how you came to be there. You may have to do a little explaining. The origin of the fire is a bit mysterious, too. My own notion is that the house was struck by lightning."

"And Moxon?"

"Buried yesterday—what was left of him."

Apparently this reticent person could unfold himself on occasion. When imparting shocking intelligence to the sick he was affable enough. After some moments of the keenest mental suffering I ventured to ask another question:

"Who rescued me?"

"Well, if that interests you—I did."

"Thank you, Mr. Haley, and may God bless you for it. Did you rescue, also, that charming product of your skill, the automaton chess-player that murdered its inventor?"

The man was silent a long time, looking away from me. Presently he turned and gravely said:

"Do you know that?"

"I do," I replied; "I saw it done."

That was many years ago. If asked today I should answer less confidently.

# Out of the Uncanny Valley

## "Mr. Broadbent's Information"

The final story of this anthology is perhaps the most sympathetic to its automaton. While this survey of automaton literature isn't all-inclusive, it is interesting to note that this story features a very smart, but non-human automaton. Previously, the other non-humanoids were a butterfly in "The Artist of the Beautiful" and a more generic robot-like Maid-of-All-Work. In the case of the former, the creator's obsession was the story's theme and connected it to the many mad scientists of this anthology and the science-fiction genre in general. In the latter case, "The Automatic Maid-of-All-Work" focused on the family's interaction with a malfunctioning automaton.

The automaton of "Mr. Broadbent's Information" by Henry A. Hering (1864–1945) sidesteps being uncanny by being a humanoid animal (more so even than the chess-player in "Moxon's Master"). Broadbent describes the little automaton as a faun. Though initially he's put out by the automaton's sudden appearance in his home, Broadbent quickly finds a use for the Faun and even gains some empathy for it. Hering was a prolific fiction writer; it's easy to imagine him in the role of his writer protagonist. The story was published in *Pearson's Magazine* in 1909.



# "Mr. Broadbent's Information"

Henry A. Hering  
(1909)

"By specialising it may be possible for science to create a type of animal capable of doing the heavy work of the world-creatures of vast physical strength, coupled with a higher form of intelligence than has been evolved as yet in any animal excepting man."

– Professor Ostwald, Leipzig University

I am James Broadbent, the author. I hold the record for fiction production—forty-eight novels in twelve years, each one turned out with clockwork regularity in three months, and each one consisting of precisely one hundred thousand words. I don't write masterpieces, but I have a reputation for good, solid, sensational stuff, and I keep my contracts to the letter. What with serial, volume, American, and occasional continental rights, my books bring me in an average of £200 apiece. In other words, my income is £800 a year. It is my ambition to make it a thousand. For this purpose I agreed to produce five novels this year, but I could not do it in London. I was good for four books a year there, and not a chapter more. An extra stimulus was necessary for the production of a fifth, and I thought I should get it in Devonshire from the moors, the sea air, and the sunshine. There, at any rate, I should have perfect quietude.

In this I was mistaken. The month after I took possession of my cottage a dangerous criminal escaped from Dartmoor. He had plenty of choice of habitations in which to seek a temporary refuge; and it was distinctly annoying that he should make a bee-line for mine. You no doubt read the account in the papers, and may remember that he was captured in my study by the police after a desperate struggle, in which I, an interested onlooker, was injured. I had to wear my right arm in a sling for a month, and for a literary man this is a drawback.

However, by daily practice, I found I could attain considerable dexterity on the typewriter with my left hand. I compose direct on to the machine, rarely altering what I type; and last Monday I was working against time in

order to make up for the hours I had lost, when a figure walked through the open French window. I finished my sentence, and swung round on my chair.

A less reassuring object I have never seen. It was apparently a very short man, dressed in an ill-fitting coat which reached nearly to the floor, and a cap brought down low over his face. His chin was buried in his collar, and I only saw an ugly nose and a swarthy cheek.

I stared at him in surprise and annoyance. "Well?" I asked.

"Forgive me for not taking off my cap," he said. "There are reasons."

He spoke in a high falsetto, stopping once in the middle of a word, then giving a curious catch, and continuing. There was a singular artificiality about his voice. It reminded me of a gramophone. He added: "I throw myself upon your mercy. I am an outcast."

He spoke these words without feeling, mentioned his position in the universe as a mere matter of fact, and again there was the curious catch in his voice.

"I suppose you're another escaped from Dartmoor?" I said, mentally resolving to leave the neighbourhood forthwith.

"Oh, no," he replied. "I come from Baxter's. I'm one of his creations."

"The deuce you are!" I exclaimed, and I have no doubt my voice expressed the annoyance I felt. Bad as it was to be saddled with an occasional visitor from Dartmoor, it was worse to be within the reach of Baxter's abortions.

Baxter, as all the world knows, has created life artificially, and he is now developing the process. I remember his speech at the last Academy dinner, when he responded for Science. "What I aim at producing," he said, "is an automaton endowed with strong vitality, great muscular strength, and a rudimentary brain, an automaton capable of doing the work of an unskilled labourer or artisan. I will anticipate the criticism that such a production will have a profound influence on the labour market by stating that I shall never rest content until I have placed it within reach of the pocket of every working man, who will then have a mechanism in his house capable of doing his work for him at a minimum of cost, and enabling its owner to walk into the country, take part in his favourite sport, or spend his time in the public library—whichever course he may deem to be the best for advancing his immortal destiny. That is how I intend to employ my discovery for the benefit of the human race."

Of course his speech was received with applause, but some thought he

was going a bit too far. I think it was the *Herald* that said he ought to be content with having created life artificially before a committee of international scientists. It was certainly impious, and ought to be illegal, to create entities possessing rudimentary brains; and only a President of the Royal Society, an ex-President of the British Association, a man with a dozen high university degrees and an international reputation, who, moreover, had the Order of Merit, and was a peer of the realm, would have been allowed so much latitude. Lord Baxter was no doubt the master-mind and the superman of the twentieth century, but there was no reason that he should be put on the same level as the Law of Gravitation.

I thought of these words as I watched the little object in its ill-fitting clothes as it wandered casually about my room. I had no objection to Baxter making his brainy automata so long as he kept them to himself; but when they became a nuisance to others it was certainly time to stop him.

Still I will admit I was curious to see what sort of a thing my visitor was. "Won't you take off your coat?" I said.

"I'll take it off, if you'll give me shelter till tonight," it replied.

"All right," I answered. "You can stay till tonight." It was sheer curiosity that impelled me to say this. I could never make use of the incident in my work. I deal with the universal, and not the abnormal.

With a little giggle it threw off its coat and cap, and stood revealed. A feeling of repulsion came over me when I saw the build. It was about five feet high, and had the body of an animal, with human legs and arms, an animal head with a prodigious cranium, on the sides of which two animal ears stuck grotesquely upward. It was a species of Faun.

"Then you're one of Baxter's automata," I said after a pause.

"I'm not," it replied indignantly. "I'm one of his special experiments. He's keen on animals with human brains just now, and I'm the biggest success he's had so far." It spoke with ridiculous complacency.

"Well," I replied, "if you're satisfied with Baxter, and he's satisfied with you, what the blazes are you bothering me for? What are you doing in this direction at all? Baxter lives fifty miles away, doesn't he?"

"I wish you wouldn't speak so crossly," said the Faun. "A very little makes me cry. I've run away from Baxter's to see the world. I knew perfectly well he'd resolve me into my elements when he'd done with me, and I determined to run away some day. But it's a big thing to do, for Baxter's a difficult man to circumvent. I don't think I should ever have got away but for



Billiter."

"Who's Billiter?" I asked.

"His assistant. He has a shocking record—was knocked off the medical register, and has all sorts of things against him, I'm sure he tortures—I've heard yells from his room. But Baxter doesn't interfere. He generally has his frog singing to him at the time, and Billiter reckons on it."

"Frog singing!" I exclaimed. "Croaking, you mean."

"I don't. He's made a frog with a voice like Tetrizzini's. You don't know what Baxter does. He can graft brains or voice on anything. He's got a ferret with an intellect bigger than Kant's. The frog sings to him by the hour—never tires—and the ferret is always working out problems in mentality that neither Baxter nor any other man could do. I don't know where Baxter will stop. He doesn't know himself. He was very pleased when he made me from my nucleus, and developed me in the oxilator. Did the whole thing in a fortnight, and grafted my brain on afterwards. I'm the biggest all-round success he's had so far. The ferret has a larger brain for problems, but no common sense."

"And what about the automatons? He said he was going to make an automaton that could—"

"Oh, I know what he promised," interrupted the Faun. "He rehearsed his Academy speech to me in the lab 'till he knew it. He doesn't care a hang for the human race, and he was laughing at you all the time. He's made a couple of automata—great lumbering things as ugly as sin, with a lot of muscle and a pin's head worth of brains. He's stuck 'em up in corners, and doses 'em with phosphates when they're hungry. He's got 'em ready if anyone calls to see what he's doing, but they're no good for work—their mentality is too low. That's why the ferret is working out problems for him. Baxter can't hit on a medium brain. Gosh! What a business it is. He never knows what his spawn will hatch into till he opens the oxilator. I've known him cultivate a thousand nuclei with only two per cent of moderate successes. He freezes the others and destroys them, or lets Billiter do it, who always keeps a few for himself. Billiter cultivates dwarf freaks—little bulls with six legs, more or less, and men's heads—satyrs, you know—dwarf elephants with fins, flying camels, and sports like that. He has an amazing collection. Baxter says he oughtn't to keep such things, but he lets him all the same. He has to. He daren't go against Billiter for fear of his laying information with the authorities. He'd never be allowed to do what he does if the nation knew it. Oh, I've sized them up."

"How old are you?" I asked.

"Nine or ten months, I reckon," it replied.

"You know a lot for your age," I remarked.

"I know I do. My brain is the smartest ever made." Here the Faun smirked with its irritating complacency. "Baxter has just crammed me with knowledge ever since I was made, to see how much my head will carry, and he can't fill it. In addition to all the scientific stuff I have to read for him, I always go through the daily paper," it said proudly.

"What about neighbours and visitors?" I asked. "Isn't Baxter afraid of anything leaking out?"

"We don't have many visitors. If anyone comes Baxter shows them round the laboratory, and trots out his automata under promise of secrecy. I and the frog and the ferret are shoved into Billiter's museum till they're gone. And as for neighbours, our nearest lives five miles away. We get on all right as a rule while Baxter is there, but he has to go to London sometimes, and then there's trouble. We've had a sickening time just now. That's why I am here. Billiter got drunk, fixed up the automata like prizefighters, and made 'em pound away at each other. They were hitting out like mad when I saw 'em last, and they'll be hopelessly damaged by this time. The frog had been singing to him for twenty-four hours on end, and he'd given the ferret the deuce of a calculation to work out. It was phosphate time for both of 'em, but Billiter wouldn't give it. It made me cry to hear the frog sing so imploringly about her food. She was singing flat, too, and the ferret had gone wrong with his additions, all for want of food; but Billiter only raved at them. I told him he ought to be ashamed of himself, but he only swore he'd do for me, and tell Baxter it was suicide. He'd have kept his word if he'd got me; but I tripped him up, ran out of the room, and locked him in."

Here the Faun stopped to snigger at the recollection of its smartness. "If those automata had the slightest sense they'd have started pounding away at Billiter," he continued. "As it is they'll only do for themselves, and I don't expect either the ferret or the frog will be alive when Baxter gets home. Anyway, I've got clear of the place, and I shan't go back in a hurry. I found a coat and a cap of Baxter's and these boots, and slunk out in the evening. I walked all last night, and I've been mostly hiding since daybreak. I saw your door open, and came in. Now you know all, and you've promised to give me shelter for the day."

It was uncanny in the extreme to hear these words proceed from the

great mouth of the Faun. They came glibly enough, but in every sentence there was the little "click" which betokened a fault in the machinery, and the voice itself was hard and metallic. It was no doubt amazingly clever of Baxter to have got so far in his creations, but it was obvious that he would have to go a good deal further before the general public would be disposed to welcome his progeny into their households. I resolved to get rid of my visitor as soon as ever possible.

"What time do you propose to move on?" I asked.

"At dusk. I think I'd better continue to travel by night. If people saw me it might get into the papers, and then Baxter would read it. I'll go at sunset."

"Where to?"

"I don't know," said the Faun. "I want to see the world immensely. I've quite taken to it from what I have read in the Encyclopedia and the newspapers. An awfully active place, I believe—rather different from Baxter's, although, of course, he's busy in his way. And so are you, no doubt," it added politely; "but I want to hear the 'roar and rumble of the never-ceasing traffic of our great metropolis,' as the *Daily Tinkler* puts it. I want to see a play, I want to see the aristocracy in the Park on Sunday morning, and I should like to go to a boy and girl dance."

"Yes, that's all very well," I said; "but you've got to earn your living, you know. How do you propose to do it?"

"Oh, I shan't require much," said the Faun. "I judge from what I've read that food costs a great deal. I only want a little phosphate now and again. Tuppence a month will feed me. Then I notice from the advertisements that beds cost a great deal. I never go to bed, so that's another item off."

"Well, anyway, you'll want a shakedown," I remarked—"a bit of straw in a corner somewhere."

"Please don't confound me with the lower animals," said the Faun stiffly. "I do not want either straw or linen. I do not sleep at all."

"What!" I exclaimed. "You never sleep!"

"None of Baxter's creations sleep. That's one of his great points. He's got ahead of nature in that. No, we just go straight along with a bit of phosphate now and again for a pick-me-up. That's where we have our pull over regular folk. I can work twenty-four hours a day if you like. Think what a lot I could do in that time. Couldn't you employ me temporarily—just till things are a bit settled, and I've got accustomed to the world?" it pleaded.

"In what capacity could I employ you?" I asked.

"As secretary, if you like. You don't know how invaluable I should be. I remember everything I see, hear, or read. I've gone halfway through the Encyclopedia Britannica, and I remember every word of it. Shall I recite you the first page? 'A. The first symbol of every Indo-European alphabet, denotes also the primary vowel sound. This coincidence is probably only accidental. The alphabet . . .'"

"Thank you, thank you, that will do," I interrupted. "I will take the rest for granted."

"Or, if you wanted poetry, I could recite the two Paradises of Mr. Milton," persisted the Faun. "They are long, but very interesting."

"Of man's first disobedience, and the fruit  
Of that forbidden tree . . ."

it began. I let it go for ten minutes or so and it never stumbled, or was at a loss for a word.

"Thank you, that's enough," I said at last. "It is highly creditable to your memory, but I don't see how it would be of any use to me. I am a writer myself, and I prefer my own composition to anything in the Encyclopedia Britannica or in Milton. That sort of stodge would be no good at all to me."

"But I can be of use to you in a dozen other ways," said the Faun. "I typed for Baxter, and I could do the same for you. Yours is a different instrument, but I could work it for you. Watch me."

It pulled my machine forward, and commenced to tap the keyboard—at first slowly, but every second with increasing quickness and confidence. Once learnt it never forgot the position of a letter. The last line was typed as quickly as I could have done it myself.

"There," it said coaxingly, handing me the sheet, "I'm sure I can be of use to you. Take me on trial, please."

I took the Faun on trial. I dressed it up in some old clothes of my own, which fitted absurdly; but as I walked about the room dictating my novel, I was almost persuaded that my indefatigable and highly intelligent amanuensis behind the typewriter was a human being. Certainly no human being ever was half as useful to me.

Two days later a great idea occurred to me. It had always been my ambition to do a sound historical novel of the Stuart period, but this would necessitate research and reading, for which I had neither time nor inclination.

But now I had as my assistant a being capable of working twenty-four hours a day, a being, moreover, that never forgot a word it read. The opportunity was unique, and I must take advantage of it. As soon as I had finished the novel on which I was engaged I must start my historical romance. I wired at once to town for Clarendon's History of the Rebellion, on which the Faun could browse from eleven at night until eight o'clock in the morning, and so be able to give me the setting for my tale.

It was, as I have said, a great idea, and I think it would have been the country's gain as well as my own if the plan could have been carried out, for archaeologically and historically, at any rate, my novel would have been perfect. But it was not to be. The following day—yesterday, that is—I was taking my regulation two turns round my garden preparatory to starting the afternoon's work. In a few minutes I should be describing the death-struggle in the roof-garden of a New York restaurant between Raymond Kneller, the multi-millionaire, and the man he had so cruelly wronged. I was arranging the situation in my mind, when suddenly a man came round the corner of the house—a big man in a fur-lined overcoat. I knew him in an instant. There was only one man in England with that leonine head, those deep-set eyes, that cruel mouth, that arrogant nose and chin.

It was Lord Baxter.

"Mr. Broadbent," he said, "I believe you have one of my automata on your premises, and will thank you for its return."

So it had come at last. There was to be a fight for the possession of the Faun. I was not going to lose it without a struggle. It had already made itself invaluable to me, and without its aid I could not possibly tackle the Stuarts.

"I have no automaton in the house," I replied firmly.

"Um," he said quietly. "Perhaps we differ as to terms. I think you have in your possession a being resembling a Faun, with a mental capacity above its station in life. You surely do not deny that?"

"I neither affirm nor deny," I answered. "I would simply point out to you that my house is beyond your authority. If I have such a being on my premises, there it stops."

"Tut, tut, sir," replied Baxter. "I have every authority over the creature. His whole mechanism is mine. I created him. If he doesn't belong to me, pray who is his owner?"

"He belongs to himself."

"I am afraid we shall not agree on that point."

"Possibly not, Lord Baxter, and upon very few others, I believe. Your wretched progeny has taken refuge here as you surmise, and I request you to leave it here where it is pursuing an industrious life in the peace and comfort which was wanting in your laboratory."

"And if I do not, sir?" inquired Lord Baxter acidly.

"If you do not, I shall place the whole matter before the world. I am a writer by profession, and have some influence with the public. I think the result will be that your scientific liberty will be considerably curtailed."

"Pooh," said Lord Baxter contemptuously. "I'm afraid you overrate your influence. I've just glanced at one of your books in the village inn, and it seems to me that it is you who ought to have your liberty curtailed. A man who pours out such balderdash at the rate I understand you do is either a public nuisance or a public danger. I have a notion you are both. But I have no time to waste with triflers. My train goes in half-an-hour. Permit me." Without waiting for permission, he strode through the open window of my work-room.

I followed. The Faun had evidently heard his voice. It now stood there behind the typewriter, quivering from head to foot, its long ears twitching with fright.

"Ah, here is our little friend," said Baxter sarcastically—"prettily dressed, too, and ready for travel. Get your coat and cap—my coat and cap, I believe, and come along. Billiter has a nice dish of phosphates waiting for you."

"I'm not coming," clicked the Faun shrilly. "I'm going to stay with Mr. Broadbent. You won't let him take me away," it pleaded piteously to me.

"Certainly not," I replied. "I ask you to leave my premises instantly, Lord Baxter."

"I am going—with my automaton," he answered.

"It's not an automaton," I said. "It is a sentient being, and as such—"

"He's simply an experiment," interrupted Baxter, "and not a particular success at that. I ought to punish him for running away, but if he comes back with me we shall continue to live in harmony as before."

"I'm not coming back," said the Faun sullenly.

"In that case," said Baxter, thrusting his hand into his pocket, and producing a box, "I'm afraid I shall have to put an end to your existence. I'm experimenting for the good of mankind, and have no time to argue with one of my failures."

He opened the box, showing an electric battery, and projecting wires with antennae.

"This may interest you, Broadbent," he said. "You could introduce it into your absurd tales, and make them up-to-date for once. This is a little electric arrangement on the principle of the Marconi apparatus. It sends messages to bodies in harmony with it, and in this case, I regret to say, the message is going to be a little unfriendly. Each living organism has its own peculiar rate of vibration, and I can regulate my instrument into exact correspondence. I happen to know the particular rate of vibration of our friend with the snout and ears, and can make him dance to any tune I like. I press the button here, and you observe that our friend does the rest."

As he spoke the Faun gave a hideous shriek, and doubled up in agony.

"A neat contrivance, isn't it?" continued Baxter in his bantering voice. "Your own rate of vibration, Broadbent, is slightly higher. If you have any curiosity to feel the same symptoms I can easily arrange the experiment. I presume your affairs are in order. If you have any messages to leave behind you might write them down while I am finishing off our friend here. Shall I press the next button?" he said to the Faun. "It would mean a somewhat painful death."

The wretched animal had fallen to the floor. Tears were streaming from its eyes. "No," it now sobbed. "I'll go with you."

"I thought so," said Baxter. "I should have been disappointed with that brain of yours if you'd said anything else. Get your topcoat."

He turned to me and produced a cigarette-case, which he offered me. "No? Well, permit me, please. I must have my smoke after an interesting experiment," he remarked as he struck a match.

The man's callousness was as appalling as was his power. But I could at any rate impress upon him that his proceedings were no longer unknown to the outer world.

"Lord Baxter," I said, "we may as well understand one another. You are carrying on experiments that would not be sanctioned by the Government of the country."

"On the contrary," he replied, "I am working at my automata expressly for the benefit of the country."

"And what about your Tetrizzini frog and your calculating ferret? What about Billiter and his sports?"

"Ah!" he said with an ugly smile. "So our little friend has been talking?"

I expected as much. As you say, it is just as well we should understand one another, Broadbent. Now between you and I and this thing," he went on, pointing to the Faun, who now stood at our side in topcoat and cap, "I should forget everything you have heard or seen, if I were you. You know my power, and it may interest you to learn that distance does not count with me. I know your approximate rate of vibration on the cosmic plane, and can act accordingly. It would be just as easy for me to double you up from my laboratory by pressing the first button in my little box as it was to operate on our friend just now, and nothing would be easier than to make an end of you by pressing the second button between the songs of my accomplished frog. *Verb sap*. All things considered, I should strongly advise you to forget this little interlude in your existence. Now I have only just time to catch the train. Come along," he added to the Faun.

Tears were still raining from its eyes. "Goodbye, Mr. Broadbent," it clicked hoarsely. "Don't forget me." Then it pulled its cap down over its face, and followed Baxter out of the window. That is the last I saw of them.

I turned to my work, and tried to continue it; but try as I would the picture of the unhappy Faun and its captor came back to me. What would happen to it on its return to the laboratory? In the best case Baxter would make an end to it when it suited his purpose, and what might not Billiter do in the meantime?

These thoughts effectually prevented my working all yesterday. I am now five chapters behind in my novel—an unprecedented position for me—and whilst I have this matter on my mind I feel I can do no writing. I have therefore decided to let the public know what is happening in Lord Baxter's laboratory, urging that immediate steps shall be taken to protect his hapless creations. I have no use either for a Tetrazzini frog or a calculating ferret, if these are found to be still alive, but I am prepared to offer permanent asylum to the Faun. Indeed, Lord Clarendon's History of the Rebellion is now waiting for it on my table.

I am aware that I run considerable personal risk in making this exposure. Baxter knows my approximate rate of vibration on the cosmic plane, whatever that may mean, and probably can operate upon me from any distance; but if I should come to an untimely end the authorities know on whom to fix the crime.

And now, with a clear conscience, I am going to describe the terrible struggle in the roof-garden of the New York restaurant in "The Multi-



Millionaires."

# Acknowledgments

This anthology was inspired by a WesterCon 70 panel entitled "19th Century Science Fiction" presented by Paige Walters and Austin Wright. First thanks should obviously go to them. This work also owes a debt to Tom Standage and his superb nonfiction books on history and technology, especially *The Turk*.

This project took me about nine months. Before the internet, I imagine it would have taken much, much longer. Here is a list of resources that made my job easier:

Project Gutenberg:

<http://www.gutenberg.org/>

Hathi Trust Digital Library:

<https://www.hathitrust.org/>

The Edgar Allan Poe Society of Baltimore:

<https://www.eapoe.org/>

The Internet Speculative Fiction Database:

<http://www.isfdb.org>

The Encyclopedia of Science Fiction:

<http://www.sf-encyclopedia.com/>

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# About the Editor

Katherine Nabity lives in the Tempe, AZ with her husband, author Eric Nabity. In addition to editing/formatting classic works and writing her own fiction, she plays ultimate frisbee whenever she can and loves reading about early 20th century stage magic.

Other works (as author):

*Bounded in a Nutshell*

*Lucinda at the Window*

*Luck for Hire* (with Eric Nabity)

*Model Species* (with Eric Nabity)

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