

Thomas Alva Edison

31 Read the text *The Lights Still Burn* and give your idea of the author's choice of the title.

The Lights Still Burn

(From "My Most Unforgettable Character" by Charles Edison)

Thomas Alva Edison never looked like a man whose inventions had changed the world. And he never acted like one either. Once, a visitor asked whether he had received many honours and medals, he replied, "Oh, yes, Mom has baskets of them up at the house." "Mom" was his wife, my mother.

He moved about his laboratory at Menlo Park, New Jersey, with a funny walk that was more of a shuffle¹. His hair fell down over one side of his forehead. There were always chemical burns on his unpressed clothing. No, he didn't look like man who had changed our world.

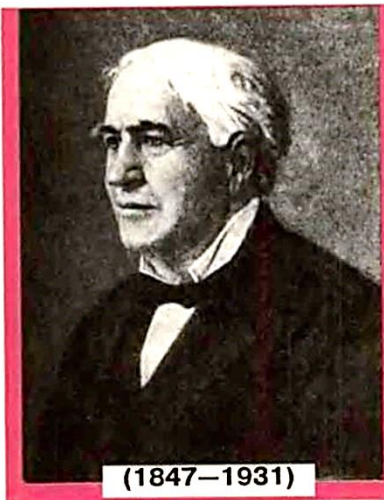
Yet every day, those of us who were close to him realized what a great man he was. His contributions to better living were 1093 inventions, but it is not for these that I remember him. It is for his courage, his imagination and determination, his humility², his wit.

Because he spent such long hours in the laboratory, he was at home very little. But he did find time to go fishing and take short trips with the family. And when the children were young, he often played games with us.

One thing I remember well was Independence Day at our home in New Jersey. This was Father's favourite holiday. He might start the day exploding a huge firecracker³ at dawn, awakening us and the neighbours, too. Then he would shoot off fireworks of different kinds all day long.

"Mom's not going to like it," he would say, but let's put 20 together and see what happens."

Always Father led us to experiment and explore for ourselves. He provided all sorts of material and got us to work with them laughing, joking, questioning. He had me washing bottles in his laboratory when I was six. When I was ten, he helped me start building a full-sized car. It never did get any seats, but it did have a fine engine⁴ by the



time I finished with it. It worked, too.

At home or at the laboratory, Father seemed to know how to get other people to do things. He could and did give orders, but he liked better to inspire people by his own example. This was one of the secrets of his success.

He was not, as many people believe, a scientist working alone in his laboratory. After he sold his first successful inventions — for \$40,000 — he began hiring chemists, mathematicians, engineers — any-one who knew things that he thought would help him solve a difficult problem.

Often Father had money troubles and couldn't pay his men. But, as one of them said later, "It didn't matter. We wouldn't stay away."

Father himself usually worked 18 or more hours a day. "Achievement provides the only real pleasure in life," he told us. He slept only four hours each night, with a few additional short naps⁵. "If you sleep too much," he said, "you get dopey⁶. You lose time and opportunities, too."

His many successful inventions are well-known. Among them were the phonograph⁷, which he invented when he was 30; the incandescent bulb⁸, which lighted the world; and moving pictures. These are only three of hundreds. He also made the inventions of other people into practical things that could be bought and sold. Without his work, the telegraph and telephone, for example, might have remained unknown.

It is sometimes asked, "Didn't he ever fail?" The answer is yes. He failed quite often. But he never hesitated to act because he was afraid of failing.

⁴ engine ['endʒɪn] — двигатель

⁵ nap — короткий сон днем

⁶ dopey ['dɒpi] — вялый, полусонный

⁷ phonograph ['fəʊnəgrɑ:f] — фонограф, прообраз граммофона, но запись ведется на валик, и игла колеблется вверх-вниз (в граммофоне игла колеблется поперек дорожки)

⁸ incandescent ['ɪnkændesnt] bulb — лампа накаливания

¹ shuffle — шарканье

² humility [hju:'mɪləti] — скромность, застенчивость

³ firecracker ['faɪə,kɹækə] — фейерверк

"We haven't failed," he told an unhappy worker during one set of disappointing experiments. "We now know 100 things that won't work. So we are that much closer to finding one that will."

His feelings about money were somewhat the same. He never hesitated to spend every cent that he had. He considered money a material, like metal, to be used rather than kept. He put nearly all his money into his experiments. Several times he was almost completely without money, but that didn't stop him.

I especially remember a freezing December night in 1914, when Father's experiments on another invention of his were still a great disappointment. Father had spent ten years and a lot of money on it. Only the money from his motion-picture machines and photographs was keeping the laboratory open and his family alive.

On that December evening the cry "Fire!" was heard in the laboratory. Within moments everything was burning. Chemicals were exploding like fireworks. Firemen from eight nearby towns arrived, but the heat was so great and the water pressure² so low that they could do nothing.

When I couldn't find Father, I became worried. Was he safe? Would losing his laboratory make him losing his courage and determination? He was 67, too old to begin again, I thought. Then I saw him in the yard running toward me.

"Where's Mom?" he shouted. "Go get her! Tell her to tell her friends! They'll never see a fire like this again."

At 5:30 the next morning the fire was still burning but under control. He called his workmen together. "We are going to build again," he said. And he started giving orders.

One man was to find a building in which they could work while the new laboratory was being built. Another was to get men and machines to clear away the burned building. Suddenly Father said, "Oh! Does anyone know where we can get some money?"

"There is always some value," he told the men, "in every trouble, even the destruction of everything we own. The fire has cleaned out a lot of things that were really no good. We'll build bigger and better next time." Then he rolled up his coat, shuffled over to a table, climbed up on it and went to sleep.

Because he was able to lose everything and start again, and because he invented so many practical machines both before and after the fire, he appeared to have a magic power. He was often called "The Wizard of Menlo Park".

"Wizard?" he would say. "It's hard work that does it."

And Father never changed his sense of values.

It has often been said that Edison had no schooling. And it is true that he went to school for only six months. But his mother taught him at his boyhood home in Port Huron, Michigan. With her help, he was reading histories of the Roman Empire at the age of eight or nine.

After he started selling newspapers on Michigan trains, he spent whole days reading in the Detroit Free Library. In our home he always had books, magazines and a half dozen daily newspapers.

From childhood, this man who was to achieve so much was almost completely deaf. He could hear only the loudest noises, but this did not trouble him. "I haven't heard a bird sing since I was 12," he once said. "But being deaf probably helped me." He believed that it drove him to reading when he was young, provided silence in which he could think, and saved him from small talk³.

People asked him why he didn't invent a machine to help him hear. Father always replied, "How much have you heard in the last 24 hours that was important?" And he added: "A man who has to shout can never tell a lie."

He enjoyed music, and he could "listen" by putting one end of a pencil between his teeth and the other end on the phonograph. The vibrations came through perfectly. The phonograph was his favourite of all his inventions.

Father never stopped working. And he was not afraid of growing old. At the age of 80, he began to study botany, a science new to him. He wanted to find a North American plant which would produce rubber. He experimented with 17,000 kinds of plants and finally got rubber from an ordinary roadside plant, the goldenrod³.

Finally, at 84, his health started to fail. Newspapermen arrived at our door to keep watch. Every hour the news was sent out to them: "The light still burns." But at 3:24 in the morning of October 18, 1931, word came: "The light is out."

On the day he was buried, all electric lights in the nation were to be turned off for one minute in his honour. But this seemed too dangerous and costly. Instead, only certain lights were turned off for a minute. The work of the nation was not stopped, even for a second. Thomas Edison, I am sure, would have wanted it that way.

¹ pressure [ˈpreʃə] — давление, напор

² small talk — пустой разговор, болтовня

³ goldenrod — бот. золотая розга, золотарник

32 *Answer the questions:*

- 1 Who wrote the story about Thomas Alva Edison?
- 2 What does the author remember the great man for?
- 3 What episodes did the author choose to speak about Edison as a father?
- 4 What were the secrets of Edison's success and which of them did he prefer?
- 5 Which of Edison's inventions were most successful?
- 6 Which inventions of other scientists did Edison make into practical things?
- 7 What made people think that Edison had a magic power?
- 8 How many years and whose money had been spent on disappointing experiments by the time Edison lost his laboratory in a fire?
- 9 What made Edison's son feel worried about his father on the day of the fire?
- 10 What did the people do in Edison's honour on the day he was buried?

33

Suppose you are to write a film script about Edison's life.

Say which facts you would choose for a documentary film and which episodes from Edison's life you would select for a feature film.

34 *Say what evidence you can find in the story that:*

- Edison was a true scientist;
- Edison was a great inventor;
- Edison was a great personality.

35 *Say what circumstances might have prevented Edison from becoming a great scientist and inventor.*

Discussing Edison's Personality

36

The following sentences describe things that Thomas Edison did or said. How does each item characterize him?

- ◆ Always Edison led us to experiment and explore for ourselves. He provided all sorts of material and got us to work with them laughing, joking, questioning.
- ◆ After he sold his first successful inventions — for \$40,000 — he began hiring chemists, mathematicians, engineers — anyone who knew things that he thought would help him solve a difficult problem.
- ◆ He put nearly all his money into his experiments. Several times he was almost completely without money, but that didn't stop him.
- ◆ Once, when a visitor asked whether he had received many honours and medals, he replied, "Oh, yes, Mom has baskets of them up at the house."
- ◆ "If you sleep too much, you get doopy. You lose time and opportunities, too."
- ◆ "We haven't failed," he told an unhappy worker during one set of disappointing experiments. "We now know 100 things that won't work. So we are that much closer to finding one that will."

37

Discuss the reasons for doing those things and the way Edison went about doing them.

38 *Discuss the meaning of Edison's words "There is always some value in every trouble." Say what, according to Edison, the value of these troubles was and express your personal point of view on Edison's ideas.*

- 1 From childhood, this man was almost completely deaf.
- 2 He had a lot of disappointing experiments.
- 3 His laboratory was completely ruined by fire when he was 67.

39 *Read the following sentences which say how other people characterized Thomas Edison. Discuss the reasons for these characteristics and express your personal point of view on each of them.*

- He was often called "The Wizard of Menlo Park".
- It has been said that Edison had no schooling.
- Thomas Alva Edison never looked like a man whose inventions had changed the world. And he never acted like one either.
- He was not, as many people believe, a scientist working alone in a laboratory.

40 *Comment on Edison's words:*

"Education isn't play and it can't be made to look like play. It's hard work but it can be made interesting work."

"If you do not learn to think when you are young, you may never learn."

"Achievement provides the only real pleasure in life."

"Genius is 1 per cent inspiration and 99 per cent perspiration¹."

41 *Say:*

- what made Edison world famous and worthy of respect;
- what features essential to a scientist he possessed;
- what lesson a young scientist can learn from Edison's life.

42 **It is sometimes said that a true scientist cannot be a good teacher or instructor.**

What is your opinion? Does Edison's life support this point of view?

43 *Imagine that you are to explain "the secrets" of Edison's success. What would you say?*

44 *What inventions of our day do you think would be admired by Edison? Give reasons for "his" choice.*

¹ perspiration [ˌpɜːspə'reɪʃn] — пот