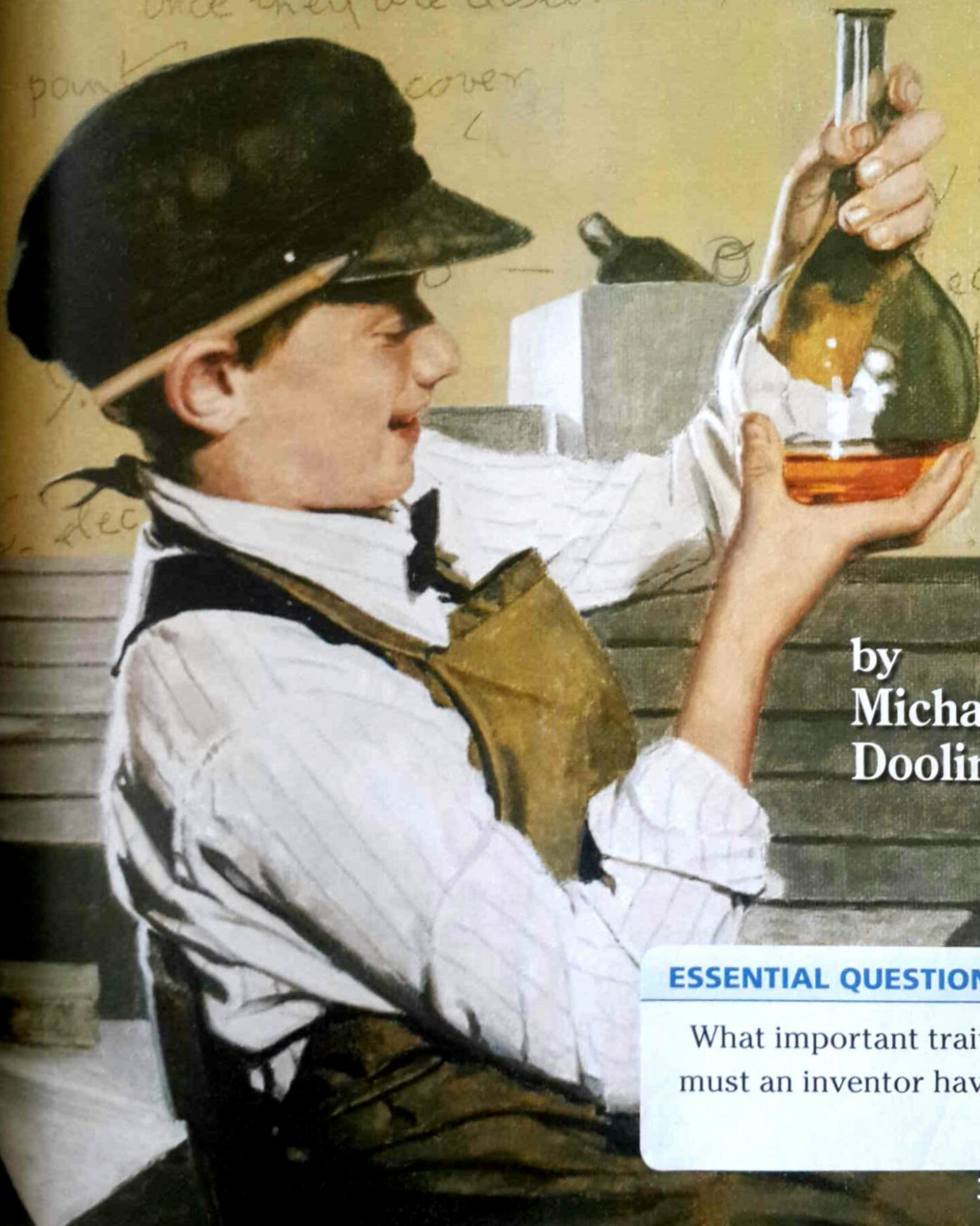


# Young Thomas Edison

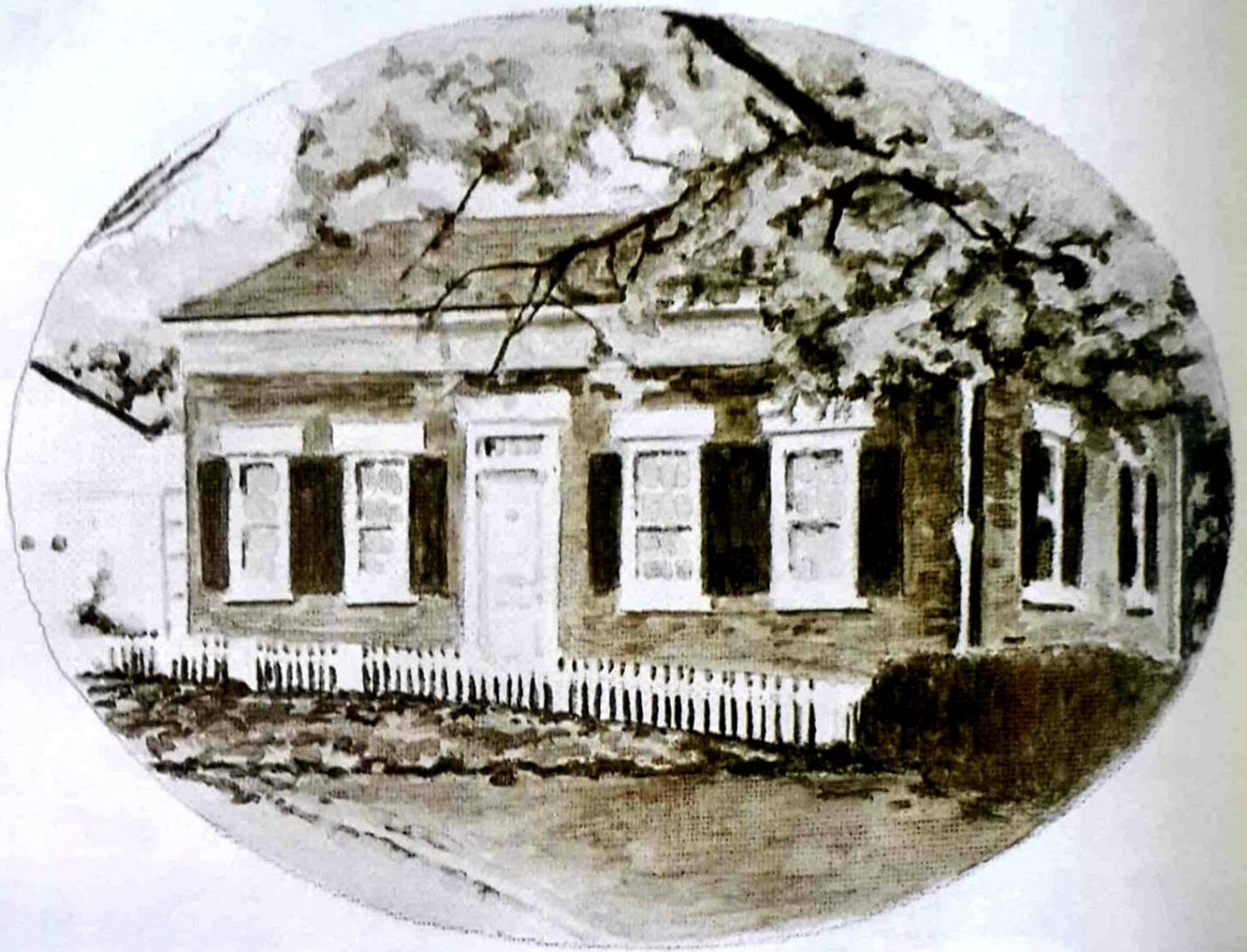


by  
**Michael  
Dooling**

## ESSENTIAL QUESTION

What important traits  
must an inventor have?





Thomas Alva Edison was born in a little house in Milan, Ohio, on February 11, 1847, to Samuel and Nancy Edison. He was the youngest of seven children.

Thomas, who was called Young Al by his family, lived in an era very different from ours. There was no **electric** light, no telephone, no radio or CD player; not even a movie theater.



$q \dots$

$$F = k \cdot Q_1 \cdot Q_2$$

... are easy to understand

... once they are discovered, the  
... is to discover  
them."

$$c \frac{dv}{dt}$$

Galileo

$$v = 0 \text{ m/s}$$

14159

objects at rest

$6485 \times 10^4$

stay at re

electricity

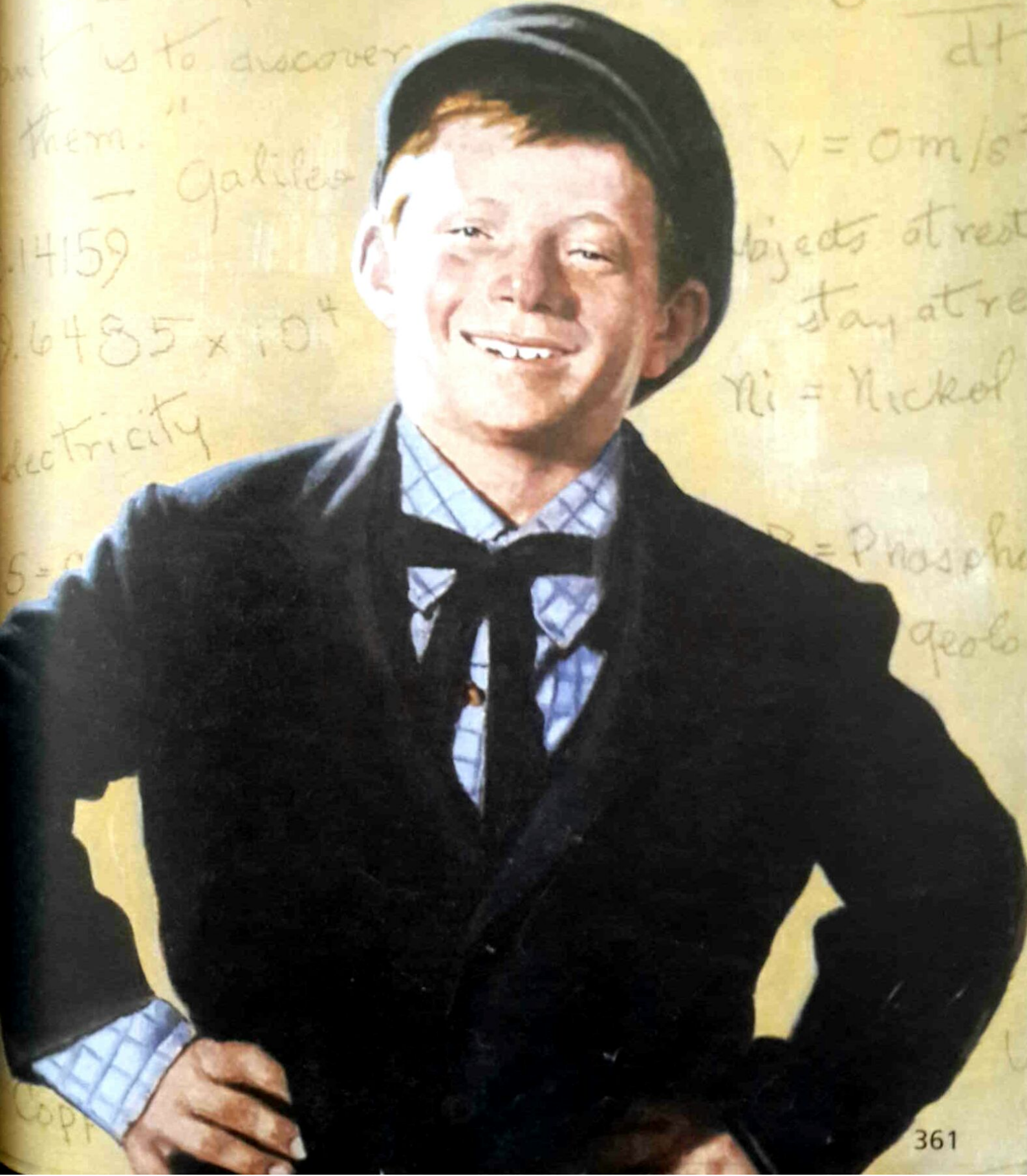
Ni = Nickel

S = S

P = Phospho

geolo

COPY



Thomas loved to experiment. In 1856, at the age of nine, he turned his family's cellar into a **laboratory** complete with test tubes, beakers, and whatever chemicals he could buy. It was a mess—bottles were everywhere. Young Al would mix one chemical after another, sometimes following the experiments in his chemistry book—sometimes not. “A little of this and a little of that,” he used to mumble.

His mother always encouraged him to ask questions, and he did. What is this? Why does that happen? How does it happen?

#### ANALYZE THE TEXT

**Main Ideas and Details** Identify the main idea and supporting details in the first paragraph on this page.







10  
2  
at  
d+h  
/s<sup>2</sup>  
rest  
re  
of  
red

POISON

Poison





A bout of scarlet fever left Al hard of hearing, which made school difficult. While Al asked many questions at home, he did not ask any at school. Instead he spent his time there daydreaming about his next **experiment**.

Al's mother, a former teacher, took him out of school after only three months. From then on, she taught him at home. Mrs. Edison made sure he received an excellent education. He read Shakespeare, the Bible, history, and much more. Over the next few years he also studied the great inventors, such as Galileo.





they are they are dis point us to discover 365



At age twelve Young Al decided to look for a job. He needed money to continue his experiments. So he went into business as a paperboy on the train that went from Port Huron, where the Edisons now lived, to Detroit, Michigan. Every morning from 7 A.M. to 10 A.M. Al sold newspapers.







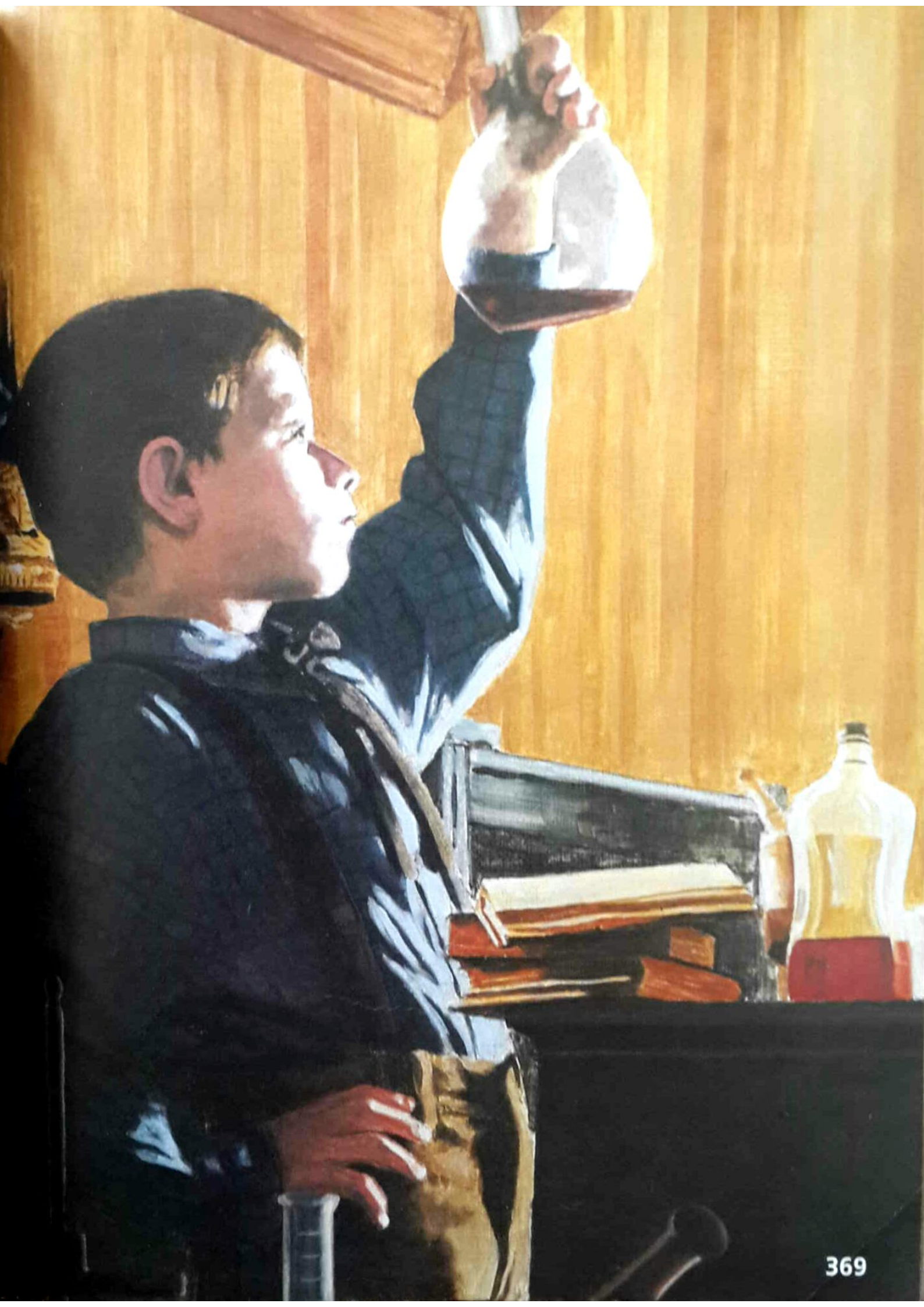
Then he spent all day at the Detroit library, reading and dreaming about his next experiment. He planned to read every book in the library, starting with the last book on the shelf and working back to the first. At night he took the train home and sold papers again.



Eventually, with the permission of the conductor, Al set up a laboratory in the baggage car of the train. Soon the young scientist was experimenting with everything: chemicals, gadgets, test tubes, beakers, doohickeys, and thingamajigs.

Things were going well until one day when the train made a sudden lurch. Bottles, books, newspapers, candies, and fruits went flying—along with Al. A bottle of phosphorus burst into flames. Al scrambled to put out the flames, but they spread too fast. Soon a very upset conductor rushed in. At the next stop the conductor threw all of Al's things off the train—even him!







Al had never been so disappointed in his life. He went home and set up his laboratory again with the encouragement of his mother. He continued to experiment and tinker with every gadget he could get his hands on. Usually his experiments did not work—but he always kept trying.







Before long Al had another job. He was a “night wire”—a railroad telegraph operator—in Stratford Junction, Canada. There was a lot to learn. For weeks, he soaked up all the information he could about telegraphy.

Al learned Morse code and much more. He worked the 7 P.M. to 7 A.M. shift, often sleeping right in the station. He also set up his laboratory in the back room of the station so that he could experiment in his off-hours. Apart from the occasional explosion, life was grand.

#### ANALYZE THE TEXT

**Sequence of Events** What events so far in Al’s life have encouraged him to keep experimenting? As you read on, see how the events work together to shape his life.



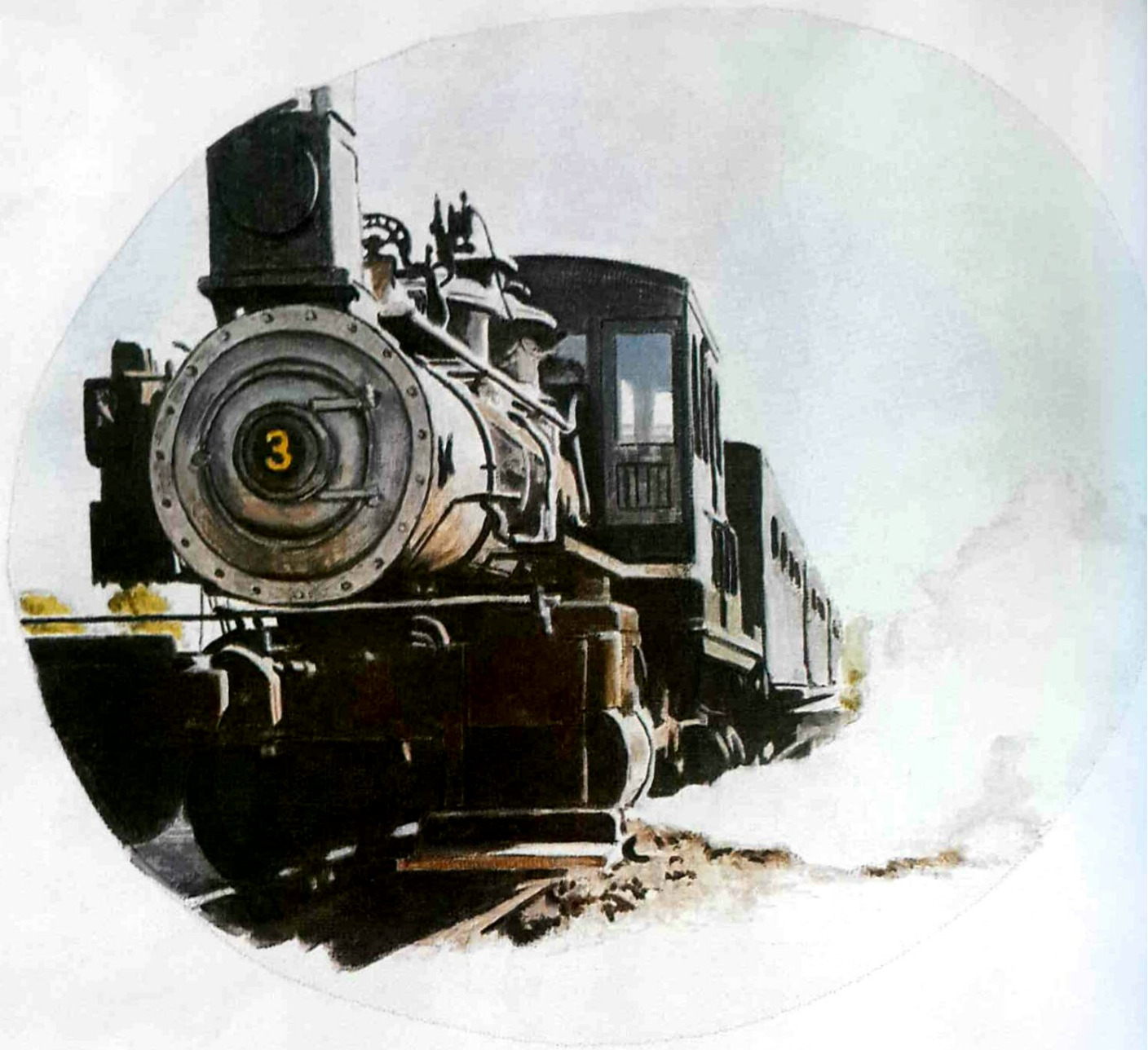
One of Al's duties as the operator was to send the **signal 6** every hour on the hour to show the dispatcher at the next station that he was awake. But the long hours sometimes caught up with him and he would fall asleep, so the scientist in him had an idea. Soon Al had invented a device that hooked the telegraphy key to a clock. When the hour struck, the minute hand of the clock sent the message 6 for him. It was a moment of pure **genius**, which quickly got him fired when his boss discovered he was sleeping on the job.












For the next five years, young Edison traveled all over the South and Midwest from one telegraph job to another. He continued to try to find ways to improve the telegraph. At age twenty-one he made his way to Boston, Massachusetts, and started using his first name, Thomas. He decided that he was going to be an inventor, and he set up his latest laboratory. He wanted to learn all he could about electrical forces. His first patented **invention** was the *Electrical Vote Recorder*. Unfortunately, Congress did not like his invention, and he could not sell it.









Over the years, Thomas's hearing had grown worse. By now, he was nearly deaf. This did not hamper his creative abilities though. In fact, he thought it even helped him to concentrate because he was not distracted by noises. It created solitude where he could tune out the whole world and think.

In 1869 Thomas moved to New York City and then later established his laboratory in Newark, New Jersey. And then bad news came from home. His mother had died. Thomas, at twenty-four, was deeply saddened. For a long time he could not even speak of her. He would miss her letters—her advice and encouragement. He owed everything to his mother.











In 1876 Thomas moved his laboratory to Menlo Park, New Jersey. He invented the *carbon transmitter*, which amplified the human voice—making the telephone and microphone possible. He also invented a machine that talked—a *phonograph*. Shortly thereafter, Thomas invented an *electric lightbulb*. He also discovered the principle of sound waves, which made the radio possible. In 1887 he moved his laboratory to West Orange, New Jersey, developing the *motion picture* and much more. At one point he had 250 people working for him and 45 inventions going.







1847-1931



Such strange, incredible inventions were coming out of his laboratory that people started to call Thomas "The Wizard." He would live to be eighty-four years old and patent 1,093 inventions. Thomas would always remember his mother's encouraging words to ask questions. What is this? Why does that happen? How does it happen?

