

Most of the fastening devices used in clothing today, like the shoelace, the button, and the safety pin, have existed in some form in various cultures for thousands of years. But the zipper was the brainchild of one American inventor, namely Whitcomb Judson of Chicago. At the end of the 19th century, Judson was already a successful inventor, with a dozen patents to his credit for mechanical items such as improvements to motors and railroad braking systems.

He then turned his mind to creation a replacement for the lengthy shoelaces which were then used in both men's and women's boots. On August 29th 1893, he won another patent, for what he called the "clasp-locker". Though the **prototype** was somewhat clumsy, and frequently jammed, it did work: in fact, Judson and his business associate Lewis Walker had sewn the device into their own boots. Although Judson displayed his clasp-locker at the World's Fair held in Chicago in 1893, the public largely ignored **it**. The company founded by Judson and Walker, Universal Fastener, despite further **refinements**, never really succeeded in marketing the device.

The earliest zip fasteners were being used in the apparel industry by 1905, but it was only in 1913, after a Swedish-American engineer, Gideon Sundback, had remodeled Judson's fastener into a more streamlined and reliable form, that the zipper was a success. The US Army applied zippers to the clothing and **gear** of the troops of World War †T. By the late 1920s, zippers could be found in all kinds of clothing, footwear, and carrying cases; by the mid-1930s, zippers had even been **embraced** by the fashion industry.

The term "zipper" was coined as onomatopoeia (resembling the sound it makes) by B. F. Goodrich, whose company started marketing galoshes featuring the fastener in 1923. Regrettably, Whitcomb Judson died in 1909, and never heard the term, or saw the success by which his invention would become ubiquitous.

1. The zipper differs from the other three fastening devices mentioned in paragraph 1 in which way?

- (a) it has been used in many more ways
- (b) it is more recent
- (c) it can be used in place of the other three
- (d) it is usually made from different materials

2. The word "prototype" in line 8 is closest in meaning to

- (a) device
- (b) design
- (c) model
- (d) original

3. What is the author's main point in the second paragraph?

- (a) despite being a successful inventor, Judson failed with the clasp-locker
- (b) Judson lacked marketing skills
- (c) Judson was a poor businessman
- (d) Although Judson invented a workable product, it did not appeal to the public

4. The word "it" in line 11 refers to

- (a) Judson
- (b) Clasp-locker

- (c) World's Fair
- (d) The public

5. The word "refinements" in line 12 is closest in meaning to

- (a) improvements
- (b) changes
- (c) promotion
- (d) additions

6. According to the passage, zippers did not really become a success until

- (a) they were used in the apparel industry after 1905
- (b) in 1913 after being remodeled
- (c) the Army used them in World War I
- (d) in the late 1920s

7. The word "gear" in line 16 is closest in meaning to

- (a) boots
- (b) luggage
- (c) equipment
- (d) tents

8. According to the passage, by the late 1920s zippers could be found in all of the following industries EXCEPT

- (a) footwear
- (b) luggage
- (c) tents
- (d) fashion

9. The word "embraced" in line 18 is closest in meaning to

- (a) welcomed
- (b) considered
- (c) discarded
- (d) promoted

10. According to the passage, the zipper got its name

- (a) when used in clothing
- (b) in 1909
- (c) from Judson
- (d) because of its sound

11. Which of the following descriptions best describes the author's last comments about Judson?

- (a) admire
- (b) sad
- (c) envy
- (d) celebrate

12. Which of the following statements can best be inferred from the passage about zippers?
- (a) the imaginative name was a major factor in its success
 - (b) a successful model had been developed commercially before Sundbach's version because it was used in the apparel industry by 1905
 - (c) Judson was an inventor, not a business man
 - (d) If Judson had still been alive by World War I his company would have been more successful

Answers

1.B 2.C 3.D 4.B 5.A 6.B 7.C 8.C 9.A 10.D 11.B 12.B