

U.S. ARMY ARTIFACT SPOTLIGHT

A NEW HELMET FOR A NEW ARMY THE DEVELOPMENT OF AN AMERICAN HELMET DURING WORLD WAR I

BY **CARRIE GABARÉE**

On the American entry into World War I, the Army set out to select a helmet for its soldiers. Military officials felt that the war's horrifically high casualty rate necessitated a reintroduction of individual troop armor, or at least metal helmets. A committee was created and considered several existing foreign models, highlighting the positive and negative characteristics of each. Germany had produced a helmet earlier in the war that met all the desired characteristics—being easily and affordably mass produced and providing maximum protection, while remaining lightweight and comfortable. The United States chose the British helmet as a stopgap solution to outfit the troops, but all the while it continued to look for a superior option that would be as good as the German design, but have a uniquely American appearance for better battlefield identification and for political and patriotic motives. Though the British helmet tested well ballistically and was easy to make, it was considered too heavy and did not provide enough cranial coverage. The British Army Quartermaster Department reserved 400,000 helmets in England for American use, and those helmets were then sent to France throughout 1917.¹

Under the direction of the Armor Committee of the American Council of National Research, the Ordnance Department worked on several developmental helmets. The chairman of this committee was Bashford Dean, a leading American student of armor and metallurgy and the curator of arms and armor at the Metropolitan Museum of Art in New York City. Dean used his vast knowledge of armor from the Renaissance through the early twentieth century to create prototypes appropriate for trench warfare. To fully assist in the effort, the museum lent its armor workshop and rich research collection to the government for the duration of the war.²

AMERICAN HELMET No. 5 (A)

This helmet was essentially an improvement upon an earlier model to increase interior head space and coverage, and to simplify the method of manufacture. However, it was still not as easy to produce as the temporarily selected British helmet. A woven chin strap was chosen for this design, as it could be quickly manipulated when attaching a gas mask. This model was ultimately rejected because it too closely resembled the German helmet, was not distinct enough from the British model, and was still not easy enough to manufacture.³

AMERICAN HELMET No. 7 — SENTINEL'S HELMET (B)

This helmet's heavy design (three weight varieties: eleven, fifteen, or eighteen pounds) was meant to protect observers or machine gunners as it was not practical for more mobile infantry soldiers. Testing found the helmet would help protect the user from rifle fire, even at 150 yards. It was reminiscent of heavy siege helmets worn extensively throughout Europe during the seventeenth and eighteenth centuries.⁴

AMERICAN HELMET No. 8 (C)

Model 8 was based on Model 5, but with an added visor. The visor was designed with a slit at eye level. While providing a decent and level field of vision, the soldier's downward view was obstructed. As the wearer could not see his feet, officials reasoned that an advancing soldier would not want his sight hampered and would therefore need to lift the visor for that purpose. Like Model 5, it offered good protection, but its extra coverage weighed seventeen and a half ounces more, ten ounces alone being the visor.⁵

LIBERTY BELL HELMET (D)

An improvement from an earlier model, the Liberty Bell helmet became the recommended U.S. standard helmet just before the war's conclusion, despite many issues. It did not balance well on the head or provide sufficient coverage. Additional space on top caused extra weight and it was difficult to manufacture. Its design caused the sides to be very thin and its lining exerted too much pressure on the head. Nevertheless, it was unique to other helmets and could be adjusted to the wearer's needs.⁶ With the war's end in November 1918, the new design became unnecessary and it was ultimately not produced. However, this helmet gradually changed to more resemble the general shape of the German World War I helmet, evolving into the modern helmet worn by our soldiers today.

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NOTES

1. Bashford Dean, *Helmets and Body Armor in Modern Warfare* (New Haven, Conn.: Yale University Press, 1920), pp. 193–96, 208–10.
2. *Ibid.*, p. 211; Donald J. La Rocca, *Bashford Dean and Helmet Design During World War I*, accessed 23 July 2014, <http://www.metmuseum.org>.
3. Dean, *Helmets and Body Armor*, pp. 213–17.
4. *Ibid.*, p. 218.
5. *Ibid.*, pp. 219–24.
6. *Ibid.*, pp. 232–33.