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Mathematical Ballistics up to World War I

G. H. Hardy wrote in his *Apology* that ballistics and aerodynamics are "repulsively ugly and intolerably dull" and also expressed ethical concerns about the use of mathematics for military purposes. Nevertheless, Hardy was largely an exception for his time, as many of his contemporaries, including O. Veblen and Hardy's long-time collaborator J. E. Littlewood, contributed to the science of exterior ballistics, the application of mathematics to projectile motion. This paper will look at significant work in mathematical ballistics during the late 19th and early 20th centuries, focusing especially on the influential theory of Turin professor F. Siacci and the ideas Littlewood developed as a second lieutenant in the Royal Garrison Artillery during World War I.