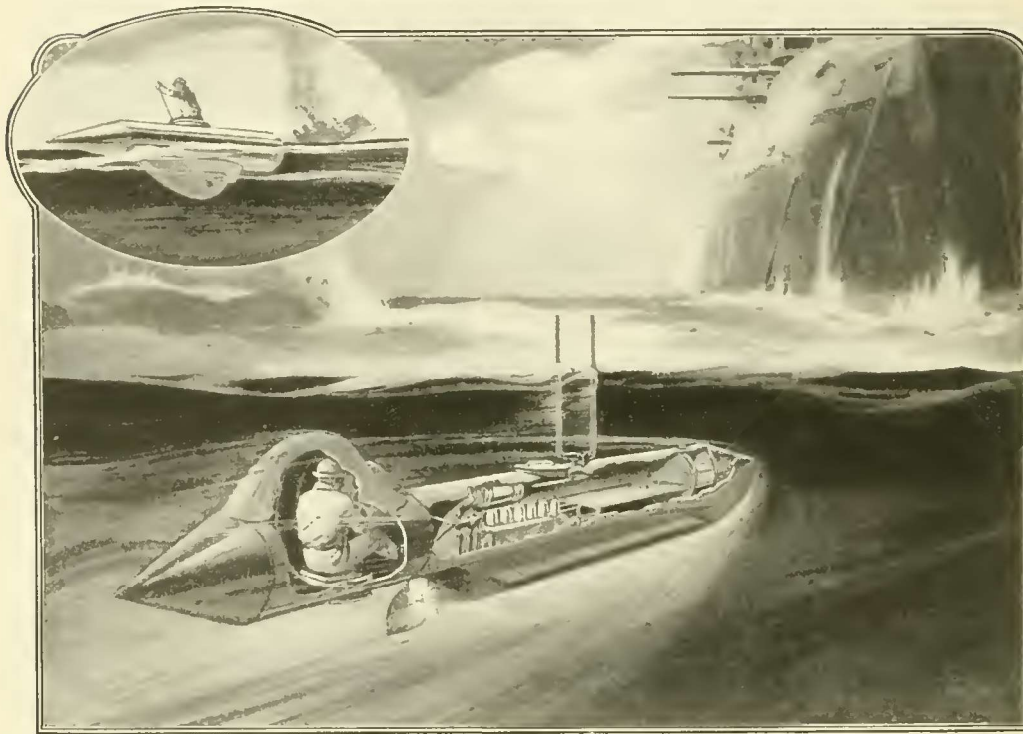


A Deadly Man-Steered Torpedo

Would you pilot five hundred pounds of gun-cotton toward a hostile battleship and brave gun-fire?



When the torpedo has been released the weight of the conning tower section causes it to keel over, thus forming a kind of canoe in which the pilot paddles back to his vessel

THE modern Whitehead automobile torpedo is by far the most feared weapon of modern naval warfare. It is, in effect, a little automatic submarine boat, with engines and rudders controlled by a mechanical brain. The soul of the torpedo is the gyroscope—a flywheel spinning at several thousand revolutions per minute. Unfortunately, this flywheel loses speed from the moment of launching. Modern naval battles are fought at ranges of five to ten miles. The Whitehead torpedo is inaccurate at such distances. Indeed, in the whole history of naval warfare the torpedo has reached its target only at short ranges.

Among the plans which have been suggested for increasing the effectiveness of the torpedo, perhaps the most daring

is that of providing it with a real brain and a real controlling hand in the shape of a man. Commander Davis of the United States Navy, designed a little vessel, some years ago, which was to contain a huge explosive charge and which was to be guided by a super-bold mariner against a battleship amid a storm of bullets. That men will volunteer for such hazardous work recent wars have abundantly demonstrated. We have only to remember how the *Merrimac* was sunk in the mouth of Santiago harbor, during the Spanish-American war, in the effort to imprison the Spanish ships believed to lie within. Dozens of men volunteered to block the channel under the fire of Spanish guns.

Hence, when Jacob S. Walch, of Walla Walla, Washington, suggests a torpedo