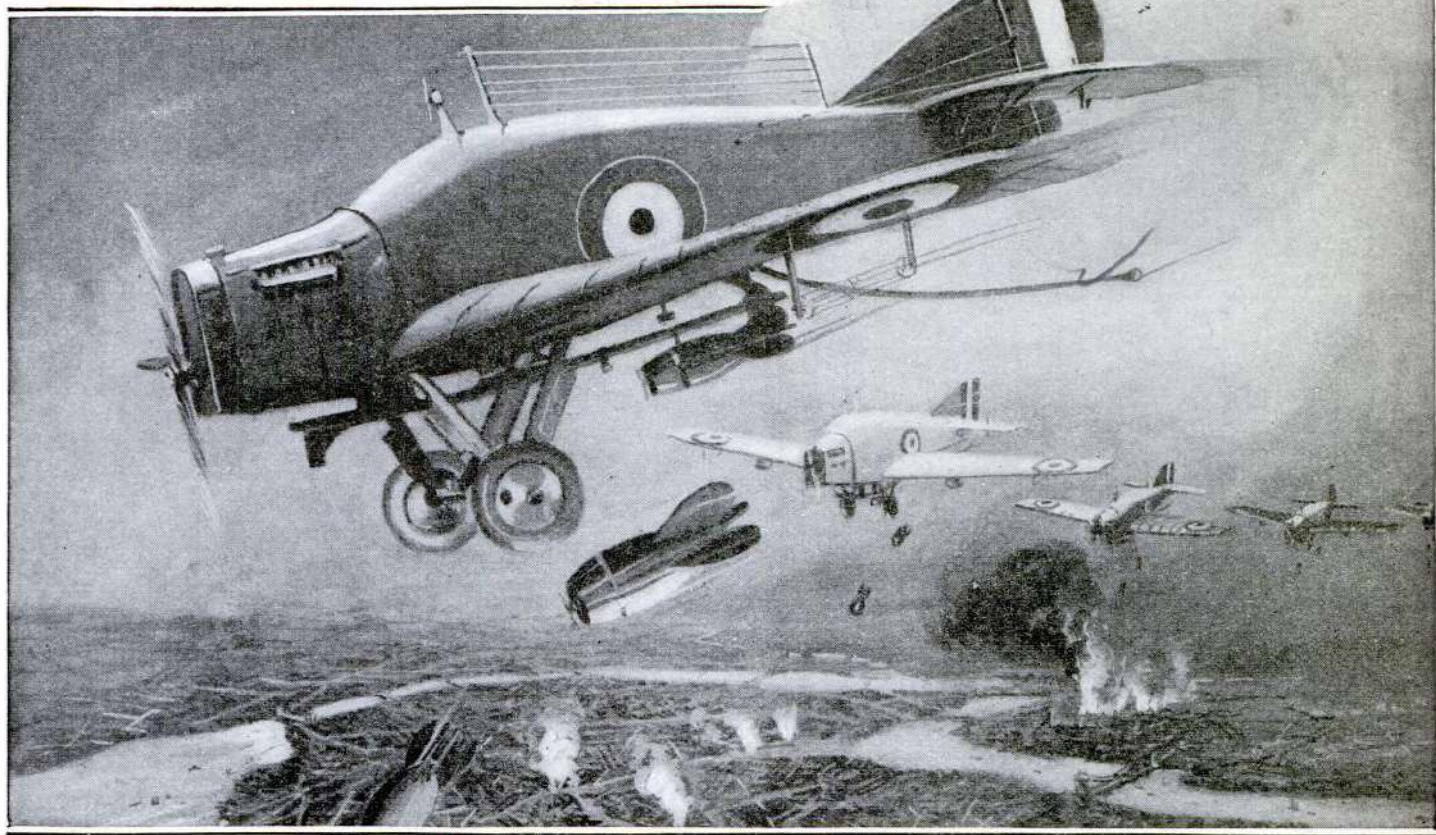


Fly by Radio



submitted to the technical section of military aeronautics in France and is being considered for adoption by the army.

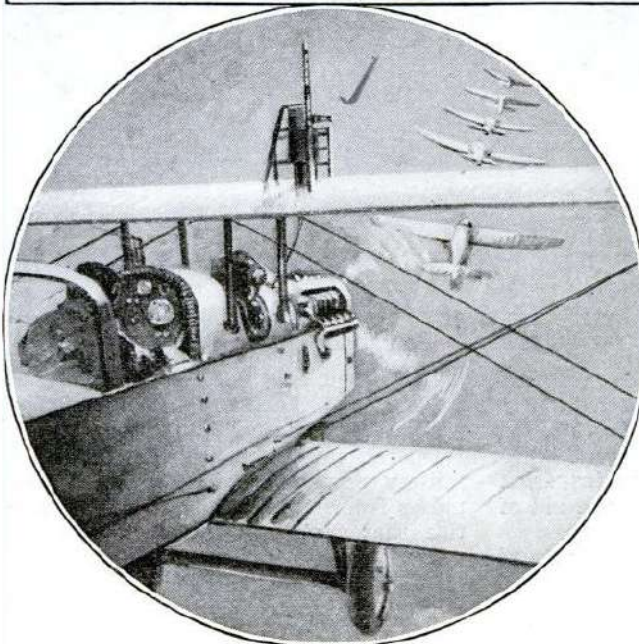
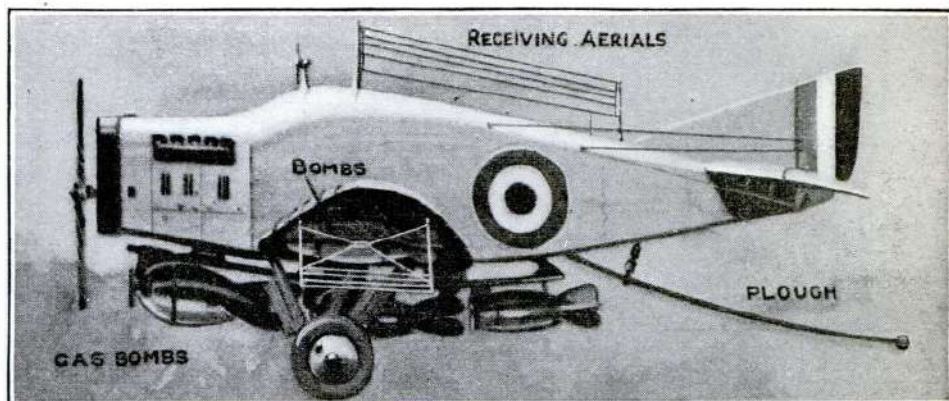
Even more startling is a plane which, advices from abroad assert, is being developed for military purposes in France. This is a radio-controlled bombing airplane, which, when completed, may be the most terrible engine of war ever devised.

A MODEL of the invention is said to have made a number of amazing test flights. In these the plane was controlled entirely by a "pilot" at a radio transmitting set on the ground. The plane took the air, completed a number of complicated evolutions, and returned to its starting place, entirely obedient to the signaled directions.

Not only that, but, in response to radio impulses, it dropped the tiny bombs it carried and destroyed a miniature city that had been erected for the test.

Another aerial war weapon on which the same group of inventors is working is a torpedo plane, which is said to send forth tiny airplanes filled with explosives. These little planes are to be controlled by radio from the mother plane. They can be directed to any desired spot, then caused to drop and explode.

Brigadier-General Mitchell, of the U. S. Army Air Service, recently asserted in effect that the cities of the world would be helpless under attack from the air. The development of aerial terrors of the kind described above tends to support his opinion, as well as the frequently expressed prediction of military experts that the next war will be fought in the air.



Pilotless Bombers to Hurl Death

The newest terror of aerial combat is the pilotless bombing plane controlled by radio, pictured in the two illustrations above. This machine is driven by electric motors. By means of wireless and ingenious, mechanical devices, its course can be directed, it is said, as accurately as if a pilot were in charge. A plow or brake at the rear is designed to halt the plane in making a landing. Another new aerial weapon is the torpedo plane (at the left) designed to send forth flying torpedoes that are controlled by radio in flight.

New Pilotless Planes

Amazing Terrors of the Air Developed in France—Rockets to Prevent Crashes

By Ellsworth Bennett

ADVANCES in aviation science almost invariably are along spectacular lines, yet it is unlikely that in many years have there been more amazing developments than in the last few weeks.

As a single instance there is a remarkable invention of Captain Albert Lepinte of the French Army. The general use of this, according to the inventor, would cut in half the number of fatal accidents in flying.

Captain Lepinte's device is a bomb, or rocket, designed to counteract the phenomenon that aviators call "loss of speed," which is responsible for possibly 50 per cent of the deaths of flyers.

Airplanes are constructed to fly normally at an angle of about nine degrees from the horizontal. If this angle is increased slightly for some reason, the plane immediately begins to sink, due to loss of speed and decreased "lift." If this happens while the plane is high in the air, the aviator can return to normal position by operating his elevator. If the loss of speed occurs near the earth, however, the pilot cannot stabilize his plane in time to prevent a bad landing, or possibly a fatal crash. He is obliged to land.

CAPTAIN LEPINTE'S invention is designed to permit pilots, in case of loss of speed, to straighten out their planes, clear obstacles, such as hillocks or depressions at the point selected for a landing, and regain the power of flight. In case of free falling from great heights, the device is intended to check the speed of descent, and stabilize the plane.

He has placed a series of rockets on the sides of the plane or within the fuselage, set at angles determined by scientific calculation. These are filled with a high explosive, capable of producing a great volume of gas under extremely high pressure. The rockets are set off by an electric spark, and the gas escapes through tubes placed at various parts of the plane. When the rockets are exploded, the volume of gas released produces a retarding or accelerating force on the plane, according to the part of the plane to which it is applied, and this suffices to move the plane into stability.

Thus, the rush of gas through escape pipes beneath the plane will cause it to rise slightly, the inventor claims.

The principle by which the rockets operate best may be explained possibly by saying that the action of the rockets on the plane is similar to the recoil of a gun.

Captain Lepinte's device has been



Saved from a Fatal Crash

How the amazing safety bombs invented by Capt. Albert Lepinte might save an aviator plunging to earth in a perilous nose dive is pictured above. A series of explosions at the nose of the plane, discharging gas at high pressure would check the speed of descent and stabilize the plane. Similarly, a landing plane would be aided in clearing obstacles by the discharge of bombs beneath the plane, as illustrated at the right

