Mother to the Seaplanes

By Graser Schornstheimer

THE aircraft carrier is one of the most important developments of naval war. With aircraft for spotting purposes a battleship's gunnery was improved 30 to 40 per cent.

An aircraft carrier must be repair base, fuel base, and launching and landing platform for airplanes. She must have speed, for the fleet is only as fast as its slowest ship.

The former collier *Jupiter*, equipped with the electric drive, has been remodeled to carry planes, and renamed *Langley*.

A large deck is required as a launching and landing platform. So the *Langley* ejects her smoke through the sides by tubes that carry it aft before discharging it. All modern ships must have masts for radio equipment, and masts that telescope into the ship have been fitted to the *Langley*. The elevators that take the airplanes to and from the platform rise so that the floor of the elevators is flush with the platform.

Below the platform is the main deck on which are hoists to lift seaplanes and place them in repair-shop or hangar. This is also the gun-deck upon which four five-inch guns are mounted. The quarters for the ship's complement are located here.

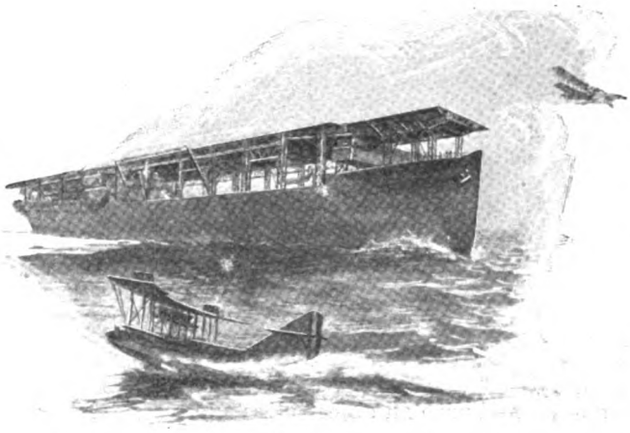
Below this deck lies another on which are the hangars, where all the seaplanes not under repair are carried, also the repair-shop.

A crew of twelve officers and a hundred and seventy-nine enlisted men will be carried in addition to the aviation complement.

The *Langley* will probably carry thirty airplanes. Both land and sea types will be used, divided into these classes: fighting planes, scouting planes, scouting and spotting planes, torpedo planes, and possibly some bombing planes.

The *Langley* is probably too slow for the duties she is expected to perform. All battleships have a speed of twenty-one knots; the *Langley* has but fifteen.

The position of the aircraft carrier with the fleet is in the smoke screen. Then it can help ward off destroyer and submarine attacks and make the scouting planes more efficient. For this service a ship needs every knot of speed that can be given her.



To be an aircraft carrier a ship must have a large, clear deck, and she must have speed enough to keep up with the fleet

He is receiving radio messages with a small apparatus that looks like a book

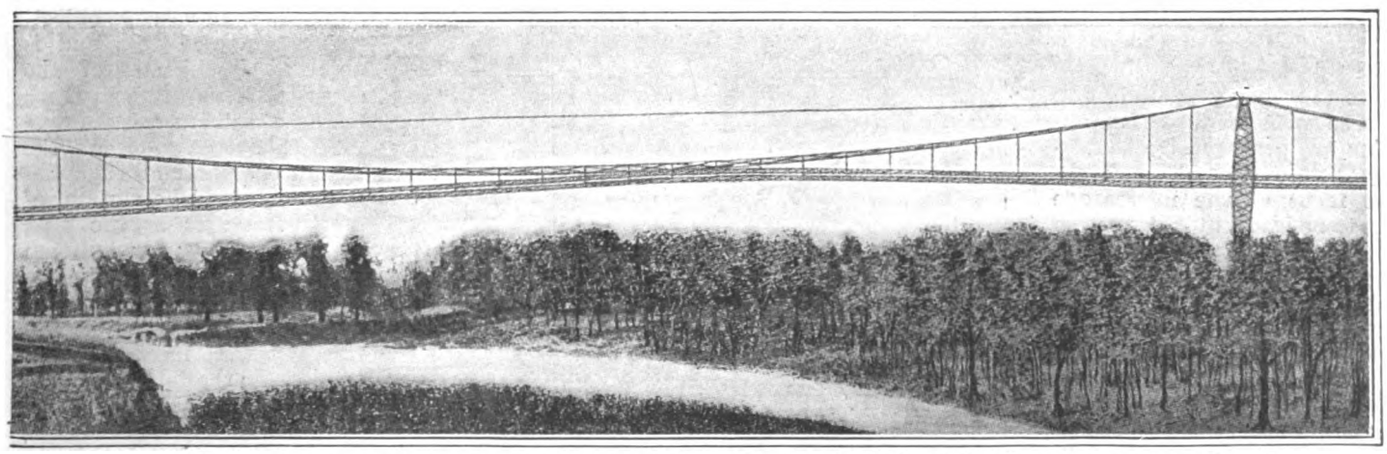
It Isn't a Book, But a Radio Outfit

HERE is a radio outfit arranged in a flat box. The man puts up a small aerial, on a cane, takes out his "book," adjusts his receivers over his head, and combs radio messages from the sky. He "tunes" his outfit to different wave-lengths by adjusting the covers of the book.

When the book is wide open, the radio equipment is ready to receive from stations with long wave-lengths. When the book is closed, the outfit is tuned to receive messages from small amateur stations.

Signals have been received over a distance of 300 miles.

to Carry Passengers and Mail between Lille and Turcoing



This novel system of locomotion has been approved by the Commission Interministérielle, which was nominated by the French government to make an investigation. Construction has already begun on a line running between Lille, Roubaix and Tourcoing.

The line is designed for the transportation of passengers and mails, being constructed to provide rapid transportation. But why all this complication? Why not an airplane or airship service between the points bridged by this elaborate structure?