

**CARRIER** 

Newest aircraft carrier in America's Navy is the U. S. S. Hornet. On the decks of this ship, nearly a hundred airplanes can take off and land. This type of vessel, although very effective, is expensive, slow to build, and vulnerable to torpedo attack. This is an official U. S. Navy photograph.

rine raiders. They can be equipped with sufficient armament to prey on cargo vessels.

Although obviously not calculated for any sort of mass bombing of cities like that practiced in the past on London, the seaplanes based on catapult ships could conduct a series of hit-run surprise raids which might destroy coastal oil supply bases, reservoirs and city water supply systems, power supply centers, transportation centers, and so on. Piloted by men already familiar with the lay of the land, the raids could be devastating.

Trusting to her ability at a quick get-away from one unmapped location to another, and to the difficulty of detecting a small boat on a mighty ocean, the mother ship might boldly summon her catapulted planes to the shelter of her decks by a radio homing device operated for brief intervals. Even though all the Coast Guard and Navy vessels on the sea should pick up her signals, they could not speed to her destruction fast enough, unless they happened to be in the immediate vicinity. Her only fear is from aircraft.

If Germany plans a surprise attack on the United States using these catapult ships—apparently not yet sprung on her enemies in this World War—it is logical to suppose that the time she would pick would be in the early summer months when weather and water conditions are best for catapulting and retrieving seaplanes that have come down on the water.

Best protection against such an eventuality would seem to be in a superior use of the same weapon. The United States has the facilities to launch any number of such catapult ships. They could be stationed 300 to 400 miles from the coast. From their decks an air patrol could be on the constant lookout for enemy aircraft, enemy carriers or catapult ships, submarines or any other signs of enemy activity.

These "outer defenses" would stand a chance of spotting aircraft headed for our shores in time to take action to warn our coast defenses. They would be better placed for trapping catapult ships, surface raiders and submarines than would an air patrol that must return to shore for refueling or aid.

As an offensive weapon, the seaplane catapult ship team would be just as effective for the United States as for our enemies. For relatively little cost in money

and precious construction time, a whole fleet of such small ships could be placed at strategic points in the Pacific that would enable our airplanes to conduct the sort of paralyzing raids on Japanese island bases that Japan attempted on Pearl Harbor.

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GEOLOGY

## Torrential Rains Held Responsible for Erosion

TORRENTIAL rains called "gully-washers" in some parts of the South are just that; they are largely responsible for the disastrous deepening and spreading of gullies in Southern fields. So Prof. Stephen S. Visher of Indiana University has concluded, after a study of data accumulated by the U. S. Soil Conservation Survey and the U. S. Weather Bureau (Journal of Geology, Jan.-Feb.).

Soil erosion, blamed in various quarters on slack farming, lack of permanent ground cover, etc., involves also one neglected factor—the intensity of individual rains, Prof. Visher believes. Total annual rainfall does not tell the whole story by any means: 50 inches of precipitation distributed as a hundred half-inch rains will not do a minute fraction of the mischief that would be caused by the same amount concentrated in ten five-inch downfalls. And the Gulf States, the present studies indicate, have heavier single rains, and more of them, than any part of the North with comparable annual precipitation.

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There are some plant names in the Bible that often lead modern readers into confusion. The "husks that the swine did eat" have nothing to do with our familiar corn-husks; they were the pods of a leguminous tree known as the carob. Coarse and tough to chew, they are nevertheless sweetish and really nutritious. So the Prodigal Son might have been worse off than he was, at that.

Sycamore does not mean the tree known by that name in this country. That tree is called the plane-tree in the Bible. The Biblical sycamore (properly sycomore) is a species of fig. The "lily of the field" was not a lily; Miss King says it was an anemone. "Mulberry," in I Chronicles, seems to be a mistranslation for quaking-aspen. There are other instances of this kind, where it is always interesting, and sometimes important, to have incorrect impressions set right.

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