

**A BLAST OF DYNAMITE AND HOW IT WAS PHOTOGRAPHED.**

BY ARTHUR INKERSLEY.

Though giant powder is frequently used to remove rocks, tree stumps, and other obstacles to cultivation or construction, it is not an easy thing to get a satisfactory photograph showing the actual explosion of a blast. The photographer must be near enough to the center of activity to secure a detailed picture; he must watch the progress of the explosion, and expose the plate at just the right instant; and, besides all this, he must be able to save himself and his camera from the stones and debris flying through the air.

The photograph here reproduced was made in a little town named Stirling City, in California. The blast was designed to remove a stump in the roadway. The camera was set up in a partly-finished house about twenty-five yards from the stump. When the fuses were lighted, the photographer stood with one hand on the bulb and the other holding the tripod head. After exposing the plate in the camera, he retired behind the walls, dragging his photographic apparatus with him. A moment later the stones and dirt that had been thrown up into the air came rattling down upon the house, some even coming through the window from which the picture had been made. The resulting picture is certainly a successful one, being clear in detail and filling the plate satisfactorily.



PHOTOGRAPH OF A BLAST OF DYNAMITE.

**NEW 25-KNOT BRITISH SCOUTS.**

The spirited picture of the new British scout "Sentinel," herewith shown, represents one of a class of eight vessels which have been designed solely to do scouting work. They carry only sufficient armament to drive off or destroy an enemy's torpedo boats or destroyers. Should this vessel meet with a hostile cruiser, it would not attempt to fight, but would instantly turn and run; or cruise in the offing out of gunshot range, but keeping in touch with and observing the enemy. The prime requisites for a vessel of this class are that it shall be very fast, faster, indeed, than any protected or armored cruiser; that it shall be of sufficient size and power to maintain its speed in heavy weather; that, compatible with the preceding requirements, it must be as small and inconspicuous as possible; and that it must be thoroughly staunch and seaworthy. Its armament need only be heavy enough to

defeat any craft such as a destroyer or torpedo boat that is fast enough to overtake it; and it need carry but a moderate coal supply, its sphere of action being always within easy steaming of the main fighting fleet and its attendant colliers.

the speed, and trebling the number of vessels, the work of reconnaissance would be carried out over a far wider area, and by units that were in closer touch with one another and with the main body of the fleet.

Both the United States and Great Britain are building vessels of this type, or rather the British have built, and we are about to build them. In our issue of February 11 we illustrated the scouts designed for our navy, and a comparison of the two designs will be found very interesting. It will be seen from the accompanying table of dimensions that the British ship is smaller, faster, carries much less coal, and is considerably less conspicuous than our vessels. This is probably accounted for by the fact that our scouts are intended to act, if need be, on isolated duty, which may involve steaming over long distances, where there would be no access either to a collier or the coal pile.

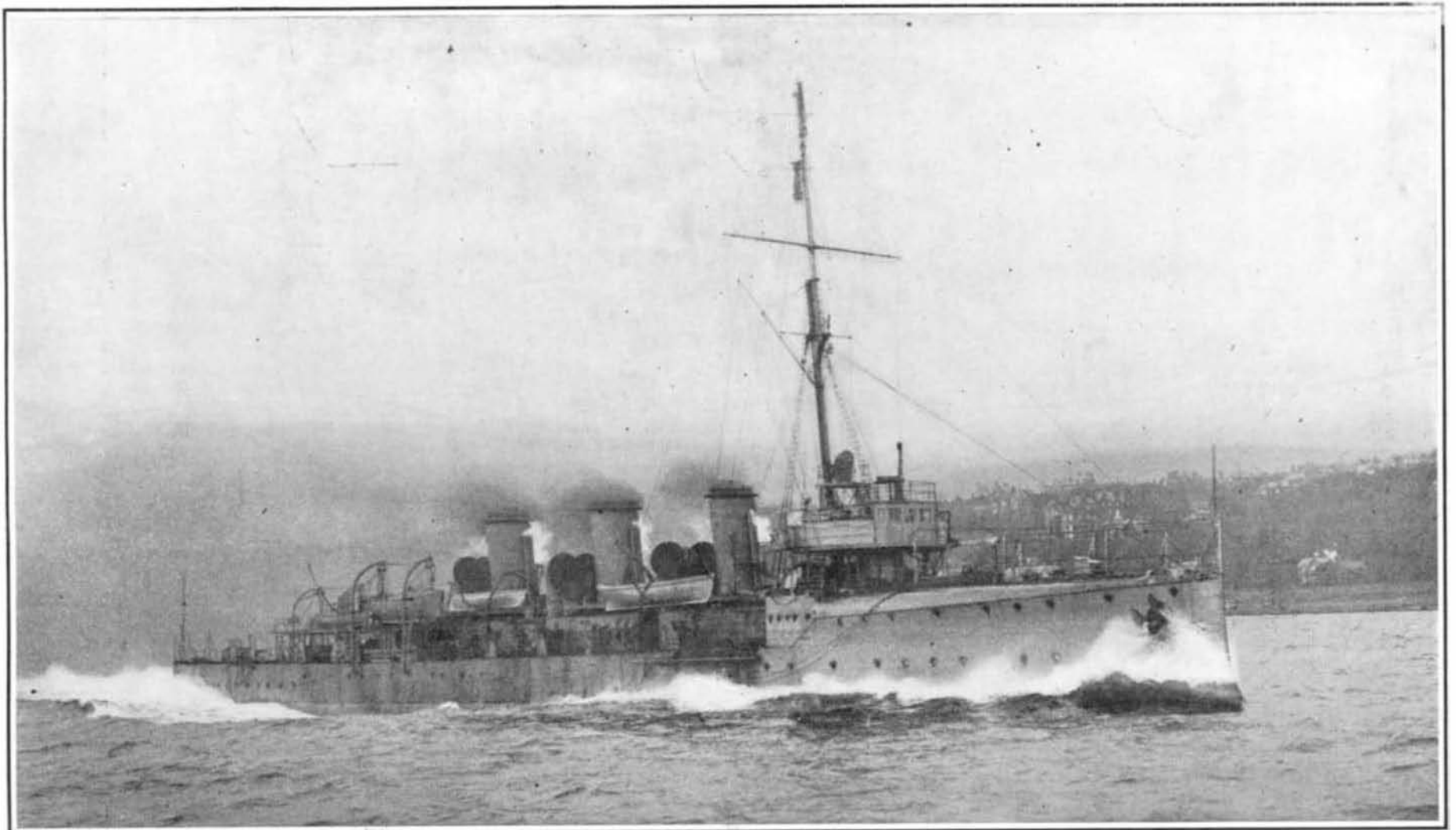
The "Sentinel" is a vessel 360 feet in length and 40 feet in beam, displacing 2,920 tons. She has a high forecastle, to enable her to meet heavy seas, but otherwise she lies low in the water; her smokestacks are unusually short, and she is very inconspicuous—a valuable feature in scouting. She is provided with a single signaling mast, and indeed, in respect of her appearance, is merely a magnified torpedo-boat destroyer, her displacement being about seven or eight times greater than one of these craft. The steam trials prescribed by the Admiralty were that the vessel should steam for ninety-six hours at cruising speed, and that the rate of coal consumption on the latter half of this run should determine the quantity of fuel that the vessel was to carry when running at full power on her trial trip.

She was to have sufficient fuel on board to enable her to steam at cruising speed for 1,500 miles; and with

COMPARISON OF BRITISH AND AMERICAN SCOUTS.

|                               | British.                     | American.  |
|-------------------------------|------------------------------|------------|
| Length, feet.....             | 360                          | 420        |
| Beam, feet.....               | 40                           | 46½        |
| Displacement, tons.....       | 2,920                        | 3,750      |
| Horse-power.....              | 17,500                       | 16,000     |
| Speed, knots.....             | 25.24                        | 24         |
| Normal coal supply, tons..... | 150                          | 500        |
| Armament.....                 | Ten 3-inch, eight 3-pounders | Two 3-inch |
| Torpedoes.....                | Two 18-inc                   | Two 18-inc |
| Freeboard, forward.....       | 24 feet                      | 24 feet    |
| Freeboard, aft.....           | 14 feet                      | 20 feet    |

These vessels were laid down a few years ago in accordance with the modern policy of the British navy, which is to reduce the larger ships of the navy to three distinct types—the battleship, the armored cruiser, and the fast scout. The battleship will form the nucleus and the main fighting element of the fleet. Spread out fanwise beyond them will be the fast armored cruisers of 23 to 24 knots speed, and beyond these in a wider circle will stretch the scouts of 25 knots speed. Hitherto the extreme outpost duty or duties of reconnaissance have been performed by cruisers of large dimensions, 6,000 to 10,000 tons displacement or more. But the number of large vessels is limited by their great cost; and it was realized that by reducing the size, raising



Length, 360 feet. Beam, 40 feet. Displacement on trial, 2,920 tons. Horse-power, 17,500. Speed, 25.24 knots. Normal Coal Supply, 150 tons. Battery, ten 3-inch guns, eight 3-pounders. Torpedo tubes, two 18-inch on deck. Armor, 1½-inch deck.

The eight vessels of this class are intended for the same duties as the new United States scouts, illustrated in our issue of February 11, with which they may be compared.

**NEW 25¼-KNOT BRITISH SCOUT "SENTINEL," FASTEST CRUISER AFLOAT.**