

SPLIT OVER EDISON SUBMARINE BATTERY

Part of Naval Board Favors Old System of Propulsion Despite Danger of Chlorine Gas.

WASHINGTON, Dec. 30.—The majority and minority reports of the Naval Board appointed to investigate the question of storage batteries for submarines after the disaster of the E-2 at New York, forwarded to Congress by Secretary Daniels, show a wide divergence of opinion regarding the efficiency of the Edison battery, with which the E-2 was equipped.

Lieutenants C. M. Nimitz, E. D. McWhorter, and Cecil Y. Johnson joined in a majority recommendation "that no Edison battery be installed in any of our submarines until further tests have shown that their disadvantages have been overcome." Captain George E. Burd, senior member of the board, and industrial manager of the New York Navy Yard, filed a dissenting report saying, "I believe that of the three types of battery tested by the board, the Edison battery is the best adapted for use in submarines."

A full explanation of the reasons behind each report is included in the correspondence sent to Congress. In every respect noted, except in generation of chlorine gas, the majority report finds the advantage to be with lead-type cells as opposed to the Edison type. Both produce hydrogen gas, but while the majority of the board found that the Edison battery produced hydrogen in "excessive quantities," Captain Burd believes this difficulty can be met by intelligent handling, and that the danger of chlorine gas from the other battery is more to be feared.

Captain Burd notes that an internal explosion in a lead cell at the New York yard blew off the top of the container, while the Edison cell container was not damaged by a similar explosion. He points out that "it is recognized that all storage batteries are dangerous and inefficient, but they are the only means, so far as I know, of furnishing propulsive power when submerged."

The Navy Department has not acted on the reports, which are under consideration by bureau experts.