In a postscript to a recent paper on petroleum reserves, 3 G. M. Lees, our distinguished British colleague, gently and a little facetiously, chides A. I. Levorsen on account of his paper, "Estimates of Undiscovered Petroleum Reserves," read before the United Nations Conference on World Resources (August, 1949). Levorsen's estimates, Lees believes, are so large as to be "not reasonable." On this point, Lees observes:

Two thirds of Levorsen's total amount is attributed by him (on the authority of Wallace Pratt) to the continental shelves of the world; but this, of course, is based on a fallacy. The continental shelves of a continent are only the extension seaward of the land mass and, if the adjacent dry land is barren of any oil prospects, there can be no expectation from its submerged seaward extension.

There may be other readers who will share my feeling that Lees' remark, "the continental shelves of a continent are only the extension seaward of the land mass," involves an over-simplification which ignores significant differences between the land mass of a continent and its submerged seaward extension. One such difference arises from the circumstance that according to the estimates of established authorities, 4 whose competence, I am sure, Lees will not question, some two-thirds of the total volume of marine sedimentary rocks of the earth's crust are concentrated in the "submerged seaward extension" of the continents, whereas the landmasses of the continents, with an area five times greater than that of their seaward extensions, contain only one third of the marine sedimentary rocks of the earth. This is a fundamental difference and it is significant because in the marine sedimentary rocks of the earth are entombed the residues of the organic wastes, accumulated throughout geologic time, which, most of us agree, constitute the source of petroleum. The marine sedimentary rocks are the habitat of the earth's petroleum; and the overwhelming bulk of these rocks lie on the continental shelf and the adjacent continental slope—the submerged seaward extension of the land masses of the continents.

The estimated volume of the marine sedimentary rocks of the continental shelves and their seaward margins, the continental slopes, is more than 20 times greater than the volume of these rocks within the borders of the continental United States. We have already discovered more than 60,000 million barrels of oil in the United States—and the end is not yet! "The United States oil discovery experience," as Lees himself has declared, 5 "straddles such a wide range of structural conditions and stratigraphical ages that it is reasonable to apply it to other countries now less extensively explored." Is it then, a fallacy to apply this experience to the continental shelf, in the region of the greatest abundance of the host rocks of petroleum?

The volume of petroleum already discovered in the United States is more than five