SCIENCE

No Spouting Fish

Perhaps the last man to present an effective case for calling a whale a fish was Herman Melville. In *Moby Dick* he observes that, for the purposes of his messmates from Nantucket, it was quite sufficient to put whales in the same class with shad, sharks, alewives, and herring—with the difference that whales spout and have horizontal tails. Melville lost out, however, for not all men are whalers and different purposes are served by taking note of such other properties as lungs and a four-chambered heart. Much the same story holds in the study of a newer species of leviathan. Something approaching a rational case can be made for the efforts by the Army, the Navy, and the Air Force to define the various research and development programs into a land-sea-air scheme of things. But here again the press of larger purposes is in another direction.

To meet the future requirements of science and weaponry, President Eisenhower included in his legislative recommendations on defense reor-ganization several provisions bearing on the administration of research and development. Under the present system, research and development are con-ducted largely by the three military services, with the Department of Defense limited chiefly to supervisory and review responsibilities through such offices as the Assistant Secretary of Defense for Research and Engi-neering. A step in the direction of the proposed changes was taken recently, however, when the Advanced Research Projects Agency was set up in the Department of Defense, with the authority to initiate its own projects in its own facilities.

The Administration's bill, which was sent to Congress 16 April, would authorize the appointment of a Director of Defense Research and Engi-neering whose supervisory and review duties would be supplemented by the power to direct those "research and engineering activities that the Secretary of Defense deems to require centralized management." The salary of the director would be equal to that of the Secretaries of the military departments. According to the President's special message to Con-gress of 3 April, the new position would be established in place of the present Assistant Secretary of Defense for Research and Engineering.

The case against introducing major changes in the administration of research and development, insofar as it is rational, is based largely on the claim that an increase in centralization implies a decrease in the oppor-tunity for giving fresh ideas a hearing. If competition among the services is replaced by central management, so the argument runs, then not only will duplication of effort be eliminated but also that which is being dupli-cated. New approaches will be controlled out of existence. This argument, when pushed, also calls for changes, but in the opposite direction. In the May issue of *Fortune,* Burton Klein of the Rand Corporation finds that the responsibility for selecting projects should rest with the services and that the present review apparatus in the Department of Defense should be largely eliminated.

Many of the details of the President's plan have yet to be made explicit, including the arrangements with the existing research and development programs in the services and in the Department of Defense. And much will depend, as is so often the case, upon the precedents set by the first man to occupy the key office. We nevertheless see no reason why getting new ideas into circulation need necessarily be linked to an arbitrary system of categories. In the appointment of Herbert F. York as chief scientist of the Advanced Research Projects Agency, the Defense Department has shown that it can pick the right man for an important post. We hope that the President's research and development recommendations are enacted into law, and we trust that the Defense Department will find its Linnaeus.—J. T.