

ter 8, such as the desalting of water, which has been needed for centuries, achieved experimentally since ancient Greek times, but is only now being rapidly developed into its immense future destiny, as our and other governments and now even corporations enter the at last profitable area. The newly established Panel on Civilian Technology,⁴³¹ in the White House, has especially in view the encouragement of civil business application of inventions developed by the Government, usually for war, space, and atomic purposes, to the benefit of consumers and national productivity. Similar but more extensive proposals have recently been made by the Department of Commerce, for a Civilian Industrial Technology Program, to expand the work of universities, research institutions and *trade associations*, "toward solution of technical problems that are common to broad industrial sectors", says the Department. The dissemination of existing technic knowledge, the encouragement of its use, and the training of research workers would also be pursued. The example of free Europe is cited, as "devoting at least as much if not more total technic resources to civilian industrial needs than are we. In these European nations, the responsibility of the government to support financially and cooperatively the development of research basic to industry is recognized Our Government has long contributed support for technological progress in mining, fisheries, agriculture, and certain industrial segments (transportation for example), but has done very little to support broad technical activities in industry or to translate basic science into technology vital to industry It is expected that the Government investment will be increased many times by the industries themselves."⁶⁶⁷ The Department points out that 200 companies do 80% of the R&D, privately financed, a concentration too restrictive. The industries most needing help by the program are those that would most upbuild the national economy, and those that do the least inventing today; these are the most competitive, small-scale industries, such as textiles, construction, and metal working (§ 546). A start in fiscal 1963 was approved by the Appropriations committees of both Houses, but failed to reach final vote; a budget of \$7.4 million is presently requested for fiscal 1964. See further § 567.5.

[437] Some other fields for invention seem so scantily provided for that they likewise need patronage either by the Federal Government, or by universities, foundations, or our proposed semipublic trade associations (ch. 11). Such fields and the places we have discussed them are Patent Office mechanization § 105, with the creation of a new dialect, "Ruly English"; medical, surgical, agricultural, insecticidal, astronomical inventions, and science generally, already much cultivated by governments, etc. (§ 223, 224); inventions for cities and States (§ 225, 6), for dealing with air and water pollution, waste disposal, sewerage, crime, prisons, traffic control, voting machines, tamper-proof records, educational devices, inventions not fully assessable upon their beneficiaries (§ 222), such as insecticidal campaigns, conservation measures, or safety devices; and inventions and their needed scientific basis which could be brought into use only by the national authority changing or imposing a standard, notably in communication inventions, e.g., for mechanical handling of checks or letters (§ 215), reading machines and alphabets for them (§ 336); other custom-barred inventions (§ 215); methods for indexing new things and people