

[542] 2. PATENT POOLING would be accomplished, practically completely, all the best inventions from any country being opened to all who wish to use them. Exceptions made where the public interest calls for large-scale working have been mentioned in ¶ 540.

[543] 3. NO DISCOURAGEMENT OF NOVELTY would be imposed upon invention, whereas the patent system, and secrecy temporary or lasting, and commercial cost accounting, all decree that the whole cost of making inventions and their preliminary discoveries, and of all a firm's unsuccessful efforts to the same ends, must be assessed upon the purchasers of the respective successful inventions, if possible. Thus the new way is taxed, while the old way goes free, as we made clear in ¶ 253-7. Neither would there be any obstruction to the adoption of the better new way through refusal of a patent license, for reasons of monopoly or any other motive that might profit a patentee but not a nation. The evils of "bogus," "scarecrow," "dragnet," "fencing," and "delayed" patents (¶ 285-91 and 301-3) would be mostly swept aside. The time an invention needs to spread to all major firms in an industry, which in Mansfield's cases averages 17 years,⁵²⁸ would be shortened. We ask furthermore that the semipublic associations pursue special programs of combating secrecy (¶ 272-80, 425-7), hauling out trade secrets, and getting the member firms to know and actually use the latest and best knowledge and inventions, from whatever source derivable. All improper *suppressions* of inventions, which we found (¶ 304-19) to be important in the aggregate though not in the way commonly charged, would be prevented, almost wholly. But inferior inventions would be kept out of use (¶ 169), and quality could be controlled (¶ 172).

[544] 4. AN END TO DUPLICATION of inventive efforts, which we found in ¶ 179-82 to be usually wasteful when it leads to different solutions to circumvent a patent; certainly it is wasteful when it evokes identical solutions. Also reduced would be wasted efforts to invent along lines which the most competent authority to be found in the industry would condemn as proffering too little chance of success to be worth spending the people's money on.

[545] 5. MANAGEMENT BY INDUSTRY, rather than by Government, foundations, or any institution, would be an advantage for the commercial, usually manufacturing fields which would be committed to the trade associations. These associations are in closest touch with what is wanted and feasible, and know how things are easiest done in manufacturing, communication, transportation, etc. We do not say that the officers of industry are better or wiser in general than those of Government or universities, but that they are more informed on these problems they would take up.

[546] 6. THE SMALL FIRMS, which today do little for invention and less for research, would join in their support, and be encouraged to submit their problems to the helpful association, and to keep up with the latest inventions they might use. We have great industries today, like mining, quarrying, fishing, lumbering, construction, toys, furniture, foods, and all the service industries like hotels, restaurants, and stores, in which no firms are great enough to be incited to strong research programs, and in which comparatively little progress is made. A glance at a table of R&D expenditures, such as one comparing these financed by industry, against net sales,⁵²⁹ shows a ratio falling from