

of the greater institution, competition, would seem to be inherent, and reducible only insofar as rivalry is reduced, e.g., through great corporations serving larger shares of the market, or through entry of the more social, less competitive spirit of modern big business leaders, having college educations including the social sciences. It has been claimed that the great, modern corporations use less secrecy than small firms of the older, more competitive type; and American corporations less than foreign ones.²⁸⁶ GE and Bell laboratories even publish journals to acquaint the world with some of their findings. The secular trend seems to set against secrecy, save for war. If we compare our 17 institutions for the support of invention (§ 2) we see that their varying dependence on patenting-with-secrecy goes quite hand in hand with their degree of competitive motivation. Our recommendation of an 18th, novel institution in chapter 11 has a principal merit of offering maximum relief from competitive secrecy, while retaining commercial management.

[278] The secrecy innate in commercial competition can be lasting only in processes, chiefly chemical, temporary in products, and is very rarely gross, a complete and long-continued concealment of a really valuable invention. But in its milder forms secrecy is so vastly prevalent as to amount to a major fault of all competitive systems of making and holding inventions. "By and large, the mass of specialized data assembled in the course of industrial research does not become available to anyone except the owners of the laboratory."²⁸⁷ The obstacle which all secrecy obtrudes, to the rapid adoption and further improvement of all inventions, is too obvious to need more than mention.

[279] The secrecy associated with patenting can be discouraged while retaining patents, (a) by putting a premium on prompt application, through abandoning Interferences and granting the patent to the first applicant, as most countries do, unless theft of the idea can be shown; (b) by prompt processing in the Patent Office; and (c) by preliminary publication of applications, etc. For more definite proposals see § 91-7.

[280] In some degree the deeper secrecy—or merely more reticence—of commercial, compared to nonprofit inventing, is due to a different attitude and kind of men, says Kottke, the thoughtful student of electrical inventing.²⁸⁸ Industrial scientists are not writing men, they will often *tell* things they have not published; but university professors, and commonly government scientists, are obliged to write for publication, and professors are writing and talking men.

[281] 12. *The obstruction* in a patent, to improvement of the basic idea by others, is a notable drawback, although there are ways to get around it; it is an important shortcoming because it is so vastly frequent as to be the normal course in competitive inventing within the same country; its remedies are not automatic, and are often difficult. What constantly happens in commercial invention is that A makes an invention; then B, a competitor, works out an improved variety of it, which he may patent or not; then C, perhaps, and even D and E,

²⁸⁶ Vernon, comparing American with British trade secrecy, finds more in Britain, and thinks this due to more cartelism there, and more competition here. Acknowledging the paradox of such causation, he does not consider the other reasons which might account for the fact, such as the larger scale of American manufacturing, and the more social education of our engineers and capitalists. Our N 203, esp. his pp. 19-21.