

fluid catalytic cracking, superior to the original, and in this case names a fault of the original, costliness, as one reason for the rival effort.²²¹

(4) On the other hand, great laboratories seeking by the earliest possible date a greatly needed invention have occasionally set at it rival teams, with some communication between them, so that differing means might be simultaneously sought, for quickest finding of the best. On balance it appears that invention for circumvention of patents probably represents a net social loss; but the opposite is possible. Just for an example when Watt wanted to use the long known crank and connecting rod, he found that someone had patented its use in a steam engine. So he devised his "sun-and-planet" gear, an ingenious device, with one definite merit beside avoiding the patent. Yet he dropped it when the crank patent expired, and we have never heard of its being used since for anything, though it very likely could be found in some obscure nook.

[182] And now an observation. While invention for circumvention may be a merit of the patent system in some cases and a defect in others, when we are casting up the general balance we cannot add these two together, viz., that patents help inventors, and that patents can be circumvented. We cannot have it both ways. Yet the same people argue that the patent system is good because it protects one's invention, and is good because it leads rivals to circumvent a patent, by inventing a better way which avoids it. We are reminded of Franklin's defense of his facetious invention of a sundial which at each hour would fire off as many cannons as the number of the hour. He added that another merit of his invention was the great saving in gunpowder that would be realized on days when the sun did not shine.

[183] A brief summary of our seven economic reasons for patents will be given at the start of chapter 7.

PREMISES OF THE PATENT SYSTEM, OFTEN OVERLOOKED, OFTEN QUESTIONABLE

[184] The patent system and its justification or indictment, in its rivalry with the dozen or so other institutions for the support of invention, normally involves a number of usually unexpressed premises or basic assumptions, that are often not thought of, but which appear frequently and are widely enough accepted to have an influence on the structure and administration of the system, even though one must recognize that they are by no means followed in all instances. The thoughts of man and his societies are too complex for that, and also readily harbor inconsistencies. Whether these assumptions be true or false—or better how far they are true—is obviously important for appraising, judging the patent system. Unfortunately, we cannot do much to settle these questions, because this monograph is not the place to argue principles of social philosophy, over which politics has been disputing for a century. But simply to raise the questions should be a service, to the many readers who habitually overlook their existence and priority. Merely stating these premises will raise well-founded doubts as to their truth, or rather the extent of their truth.

[185] 1. That a particular invention can be defined, and that the whole world's used or published prior art can be searched enough to assure that this invention is new.²²³