ing of patents, at least for the small firm or man. For the costs of serious inventing may be immense, including necessarily the costs of development, tooling, and introduction, say a million dollars for a new engine, and many millions for a new airplane or synthetic fiber. And all these costs must be met *now*, with cashable checks, not with shares in a patent lottery, which is to pay off 10–30 years in the future, *maybe* but like as not nothing. Such tickets may be actuarially worth while, but they are hardly legal tender to pay the laboratory expenses; they will not buy the baby a shirt, the poor, naked, helpless baby invention. This is one of three great reasons (the others being war and the socializing trend) why Government inventing has in the last forty years risen to overtop all commercial support (chart 3 and ¶ 431). The Government pays the inventors and their laboratories *now* and certainly, and assumes all the risks and delays, as to whether the invention will ever succeed, to whom it will profit, how much, and how many years it must be waited for. It has been obvious that commercial invention left to itself or to the patent system, would not produce promptly the needed flood of particular military inventions.

[253] 6. *Laying a toll upon innovation* is another fault inherent in the patent system, and very important, yet rarely talked of, hardly perceived apparently, save where the patentee refuses to license.[251] Whenever royalties are charged for the use of a patented invention and perhaps know-how, they are reckoned as an addition to the producer's costs, and hence tend to be added to his sale price, thus reducing the good's sales, in favor of the old art, which is free, or tending immediately to be made so, when the better art appears. As a further device for this end "Restrictions are customarily applied to any product that is produced under a patent,"[252] to hold down the quantity produced, keep up the price at which it must be sold, or restrict the territory, or the uses to which the licensee may put it. Such restrictions may be welcomed, as part of a policing of the industry versus the consumers, even when there is only one licensee. "Sometimes they are eager to be restricted," says Edwards.[252]

[254] Patents are intended to encourage, not burden invention. More logical than our present system would be to levy a tax on the use of old methods, and pay the proceeds to the users or the patentee of the improvement.

[255] Where the patentee works the invention himself instead of collecting royalties on it, he is still obliged in greater or less degree to tax the users of the new, to recoup his costs of innovation. He will be especially inclined to do so if he has a cost accountant at his elbow. Cost accountants are hardly economists; they are normative bookkeepers who try to apportion joint costs by fixed rules, somewhat insensible to swiftly fluctuating economic realities spelled by invention and competitive business life. If an invention cost much to make, their rules tell them that that cost should be assessed upon the resultant goods sold. And there should be a further charge, their rules tell them, to cover the unsuccessful attempts. Still less are cost accountants concerned with the national welfare, when it differs from their firm's. It constantly differs anent invention; for the national interest usually asks for more invention rather than less; but to the firm there is a sooner reached profitable limit beyond which it cannot