and its effects will presumably continue while mankind lasts, long after the patent has run out and the firm and the particular need have ended.

[132] Tuska in Study 28 <sup>168</sup> gets an idea of the value of the patents of the more successful independent inventors, through analysis of court findings on those whose patents were adjudicated for some question of property, patents that had been licensed to others, rather than assigned as is usual from employed inventors. Seventy-nine court cases involved a median of 2 patents but an average of 5.8, and among these, 62 cases were affording a yearly mean royalty of \$34,000 per year, or \$7,350 per patent. Kahn <sup>168</sup> adds other evidence on patents' value to corporations.

[132.1] Edison, the world's greatest inventor, took about 1.000 patents, claiming as his all from his laboratory; but the president of Thos. A. Edison, Inc., once stated that Edison had spent more money in obtaining patents and then fighting in their support than he had ever received from his patents as such.<sup>254</sup> We shall see that Edward Weston (¶ 268), after taking about 300 patents, practically stopped. Machlup <sup>255</sup> says modern thinkers reject the idea that patents' rewards are commensurate with their merits. Patents have been said to be

chiefly valuable in rapidly expanding industries.

[132.2] A normal patent reward, if the concept has any validity, has been said by a patent writer, Toulmin, 169 to be around 20% of the sales price of the article, citing court awards; but these seem to be usually less, and our other data would hardly support so large an estimate. A royalty is further attractive from its regular income, with no further sales expense. In any case such a "normal patent reward" is by no means the same as the average reward from a patent. The former figure is gross, the latter net, after deducting all the expenses and personal time spent in making and protecting patented inventions made for the sake of their patent, counting in the unsuccessful patents along with the successful. We may also remember that a royalty is collected only on a minority of patented inventions; the majority, whether worked or not, are never licensed to others, unless to an original or later sole assignee.

## EVALUATION BY CORPORATIONS

[133] It seems best to make a couple of fresh starts in our effort to quantify the importance of the patent system, although still maintaining that our calculated catastrophic fall in the ratio of patents to inventive effort must signify a momentous decline in the importance of patents, presumably to a very minor role in the motivation of invention. Suppose we went to the corporations' financial reports, to see what values they attach to their patents. Hardly a student of this subject has done so; most companies do not publish any valuation of their patents, nor list their royalty income separately; but some do, more or less distinctly, and we have gathered in table 5 the findable data on royalties received, by the 16 companies which furnish it and hold more than 500 U.S. patents apiece, 170 plus another company that came to hand. The years are nearly contemporary and the latest at hand, save in the indicated cases where the royalty data stopped earlier. A similar but different group set a valuation on their patents (mingled often with copyrights, goodwill, etc.), which