

corporation on issue, fifteen times as much contribution to invention and research, as stands beside each patent assigned after issue or never. If the reader is familiar with invention and thinks a different ratio would be juster, he can easily substitute his own. In any case, figuring that our patents are initially assigned 52.8% to domestic corporations while 39.3% go to individuals,⁴¹⁰ and dividing the latter percentage by 15 and applying it to the "funds supplied by industry" for 1954, we get the \$110 million set down at the start of this section.

[412] A type of unorganized inventor quite different from the above discussed, is the man trying to start a new fundamental invention, where there is no established industry for it. This particularly neglected and needed type has been told of at length in chapter 8.

[413] 12. Awards and prizes:

Guessed stimulative value of awards about 1956-----\$0.4 million, 0.007%

We distinguish awards from prizes, considering that prizes are offered before the completion, for a specified invention to perform a certain function with a required degree of practicality. A notable example was the French Government offer in 1795 of 12,000 francs for a method of preserving food, won by Appert in 1809 with his inestimable invention of canning. Awards, on the other hand, far more common today, are given for inventions already made and successful, and may be bestowed through a regular system, or on occasion. Those falling under suggestion systems we treated under section 10. The motivation of both prizes and awards is almost always national or philanthropic, rather than commercial.

[414] Some amount of awards for invention and discovery in its related sciences has grown up through philanthropy, and recently through the Federal Government,⁴¹¹ all reflected in table 9. In its top line, professional societies are the chief awarders, commonly administering special funds donated by philanthropists or corporations. The awards are usually honorary, including perhaps a gold medal, but 32% add cash;⁴¹² and in this age when the alchemists are mostly on salary, honors are readily transmuted into gold, as well as being highly valued for their giving a sense of accomplishment and rank. It is very hard to put a money value on the honorary awards, and a further premium for the honorific value of the cash awards; but suppose we value the honorary awards at \$1,000 each? This will give a valuation of \$380,000, after removal of the Suggestions because duplicated in section 10.

TABLE 9.—Awards to American inventors (and to some suggestors)

Awarder	Year	Honorary	Cash awards	Total cash per year
Professional societies, etc. ⁴¹²	1955-----	168	78	\$21,510
Nobel (Physics and Chemistry) ⁴¹²	1930-56 (average)		1	25,713
U.S. Civil Service Commission (suggestions) ⁴¹²	1959-----		97,802	2,807,698
AEC and NASA ⁴¹⁴			2	140,000?
Acts of Congress-----				25,000?
Total-----		168	97,883	3,019,921

[415] 13. Compulsory license: ⁴¹⁵

1938-57, yearly-----\$33 million, 0.58%.