even the shakiest "guesstimate" is better than *no* idea of quantity. Suppose we start with Sanders' finding,[425] that know-how was essential to half the assigned worked patents, and with our "guesstimate" that one-fifth of American inventing is motivated by patents (¶ 140). Then reflect that the know-how sold is not patented directly; indeed the elusive character of some techniques, depending on knack and trained perception rather than on clearly understood science, makes such arts unsuitable for patenting or for learning through publications, but largely possible to hold secret, and perhaps difficult to convey except through personal teaching of know-how. And as we said in ¶ 275, by the time the patentee comes to selling his invention, he has always learned more about how to work it, in its various forms and circumstances, than he knew and described in his application for patent. Patent pools (sec. 14) commonly trade know-how as well as patents. But on the other hand, much teaching of techniques is of old arts, not so bound up with new inventions as to amount to a sale of these. And there is the general opinion on sale of know-how, which rates it far below patent licensing in importance; and the fact that know-how does not deal with scientific discoveries which may lead to multiple inventions, but only with practical techniques. All in all, shall we rate the sale of know-how as motivating 1¼% of invention and invention-oriented research?

Part B: Transverse Categories of Invention's Support

[421] Having now determined, so well as we can, the contributions of the 15 hitherto numbered and defined sources of support for invention and its pertinent scientific research, we have set them down in table 7 (¶ 382), with their apparently productive outlays in column 3, their percentages of the net total in column 2, and in the remaining columns the repartition of the outlays between the wider categories Government, Business, and Philanthropy. This repartition is rough, omitting a category altogether where it seems unimportant in motivation, like patents in governments' and universities' work; and it is certainly often a very fallible guess. Our only justifications are that the totals and percents at the heads of the columns and rows, are more reliable than their constituent items, and are all that we ask any credence for; and once again, that some quantified idea of magnitude, though faulty, is better than none. All previous writers have described these magnitudes with only vague phrases, like "a large share", or "very little".

[422] In the first column, however, we yield before the difficulty of finding significant statistics to measure the role of Patents and Secrecy, and simply note their presence or absence in significant degree by an asterisk (*) or a dagger (†) respectively, with an ambiguous total provided in treating the pertinent sections 16 and 17. In the case of monopoly we cannot make any repartition that would not be obvious, but shall discuss the matter under section 18.

[423] 16. PATENTS.—Patents figure in most of our numbered supports for invention, as shown by the asterisks in column 1 of table 7, even after omitting supports in which patents are only of nominal importance. But how to reckon up their real importance as instigators we are at a loss to figure out. The items marked would add up to about 38% of the total, unduplicated financially.