organized inventor fails, even if his idea be good, and successful in proper hands. Invention today is pretty much something produced through organized and regular channels. Any outsider or rebel, whether in a corporate laboratory, the Government, or his own basement, who would like to invent otherwise (unless it be some simple gadget that he knows all about), might almost as well think of starting his own great newspaper or his own telephone system or navy. But in the very few cases where he can persuade an organization earnestly to take up his idea, the invention is thenceforth in regular channels.

[401] Better cooperation still seems needed, between the outsider with a possibly useful idea, based on unusual experience or the luck of his large numbers, and the corporation or Government which knows far better what is wanted, what would fit in, and has the means to test the idea, to develop it if promising, and to use it if successful. But such cooperation is very difficult if the inventor is seeking reward for his work. (Usually with the war inventions he was not.) For with no patent yet granted him, nor usually applied for, and with duplicate inventing so common (¶ 146), each side has poor protection against the other falsely claiming priority. Some firms refuse to look at a proffered invention, unless patent had been applied for on it; but this hard requirement is enough to deter all but the most determined and well equipped amateurs.

[402] Our next statistics on unorganized inventing are those from our one important institution to aid it, the patent system. Yet these are not very satisfactory; first because they omit the vast mass, doubtless a large majority by weight, of unorganized inventions and research not patented, either because not patentable, or individually not worth patenting, or because held secret, or because the inventor was too poor, or for any other reason, though some such work has been covered by our previous statistics of laboratories and suggestion systems. Second, we have no means by patents to distinguish the organized from the unorganized inventor, except to assume that the 61% of patents assigned to corporations on issue 400 were made by laboratory inventors counted under our sections 1–9, and that the patents assigned later (3%), or not at all (36%), were the work of unorganized

[403] The validity of this—our assumption that the ratio of initially assigned to all other patents might be taken as the ratio of organized to unorganized inventive effort, and then reduced a fraction by an assumption of less inventive success (weighted output)—might be attacked and defended on many grounds. But first some more background information. Of the assigned patents 94% are developed by the company's own employees. 401 The 3% of patents assigned after issue go 88% to the small companies of Sanders' reckoning, 402 which received only 36% of the initially assigned patents. Their fields, as shown in table 8, are 85% in the Mechanical, the easiest and least scientific of the three major categories of invention, are rarest in the Chemical, and the subsequently assigned are intermediate between those assigned at issue and never.