[317] The great fundamental invention of the telegraphone affords another probable instance. Suggested in 1888, 328 and independently devised by Poulsen in 1898, 329 it has come into extensive use in America only since 1935, in the form of tape recording, for which a great and varied future opens out.329 Its use was begun in 1903, and though it lacked the electron tube to give it volume, there were a number of good functions for it. But it soon fell into the hands of a certain C. D. Rood, who proceeded to smother it and wreck its \$5 million company in ways most varied and effective, so that only a few machines ever got into use, some of them sabotaged. The truth finally came out in an 8-month stockholders' suit followed by a hearing before the Senate Committee on Patents in 1932; but by that time the company was bankrupt and its idea smothered. 330 Why should Rood do such a thing? Apparently because the invention could compete with the dictaphone, and could record telephone conversations. Rood was a friend of Edison (dictaphones), and showed this, and had connections with the telephone company, though he denied them. The New York telephone manager had said that one-third of all phone conversations were illicit in some way, if only employees phoning on private affairs, or people making promises they would not keep. So much business was endangered. We know how long their prohibition of telephone recording lasted, till 1948. Yet the clear recordings of the telegraphone can also be very useful to the telephone company, and the company helped develop the invention after 1930.

[318] It appears likely that often patented inventions which are good, but not very good, are kept out of use not by choice of the patentee, but through his incapacity—his lack of funds, connections, business ability, or whatever is needful in that particular juncture. If the invention were very good he would probably find a buyer or the requisite elements for exploitation; but there are great difficulties, and therefore with inventions not egregious there will be many failures. Supporting statistics are supplied by the recent careful studies of Sanders and his associates. They found that among the 68% of current patents not currently being worked, a reason given for the failure to use, by the one-third responding of the 35% of inventors who had not assigned their patent, was shortage or lack of venture capital in 28% of these cases, and "neglect to exploit it" in 27%. But among the respondents on the 65% of patents assigned, the assignee of the 70% of these not currently worked, gave each of the above explanations only 1% of the time. While we should much distrust these explanations by the disappointed nonassigning inventors, it is apparent that their personal incapacities were responsible for a number of

patents going unworked.

[319] Summarizing point 15, the charge that patents are used to keep good inventions out of use, we have shown that in its gross form this charge is essentially a myth, but that uneconomic temporary or only mildly unjustifiable exclusions are probably a large evil in the aggregate, although there are only one or two severe cases known. But most of this evil cannot be blamed on the patent system. It occurs

<sup>\*\*\*\*</sup> The idea is of recording sound (and now anything electrical) with high fidelity by magnetizing sections of a wire, now commonly replaced by a disk or tape. Rood, getting control in 1908, stifled publicity, but sold machines (later denying it) to the Germans, who used them with wireless most effectively to sink our ships, while he held up our own Navy's order. A court referee was also compromised and resigned. N 328.