

products and processes should certainly *intensify competition*, and encourage many to use the same best plans, fostering standardization and further sharpening the competition. And if there be any monopolistic sins in present-day trade associations, and patent pools—such charges are often brought against the patent pools and cross-licensing agreements—here is a new and potent way to combat them. All in all, our plan tends against monopoly.

[554] The argument that competition between firms, armored by patents, has worked well in the past, carries little weight in logic against an argument that something else would work better, specifically trade association inventing. Similarly, Jewkes' argument that the major inventions of the last 60 years started largely with individual inventors, fails completely to prove that the modern laboratory system is not better (§ 396). Indeed, the whole drive of invention has always sprung from a *genii* within us which whispers: Though A has been good hitherto, B would be better.

[555] Every plea for adoption of something new should be checked so far as possible, by examination of the cases where it, or something of the sort, has been tried in the past. And so we turn for partial analogy, to those industries which have had less inventive competition between firms, due to Government support, patent pooling, comity or need of large scale. (There always remain at least interindustrial (§ 552) and international competition, as we said.) Has the intergovernmental art of war been unprogressive, or has noncompetitive science? The principal commercial industries characterized by patent domination, pooling, or comity, always more or less inclined toward sales monopoly too, have included the automobile, aircraft, oil refining, bottles, and all the industries producing electric equipment or communication, including talkies and orthophonic phonographs. The completest monopoly, the telephone company, has the greatest invention laboratory, and a good record of progressiveness.³³⁰ Only the first two industries, autos and aircraft, have been accused of unprogressiveness, so far as the writer is aware. Of these, the aircraft charge would seem false, since America has always been a chief exporter of aircraft, and autos, too. The automobile, world over, has been peculiarly unprogressive in its chief basic, gasoline-engine type for the last 50 years, though making good progress in refinements and quality. Its sound early variations, such as steam, electric, and air-cooled engines, have almost dropped out. We may contrast the standardized stagnation of autos with the variety and progressiveness of the trucks and automotive equipment produced by the same companies, and thereby see that it is the public which is responsible. An auto is a uniquely large, costly, complex, and dangerous collection of machinery, such as is elsewhere sold only to engineers, and yet it must be sold to Tom, Dick, and Harriet Public. And it must be serviced by roadside mechanics, wherever it may get into trouble. Probably hence, and not from any conservatism due to patent pooling, comes the cautious policy of the auto manufacturers, avoiding all revolutionary changes and not seeking to get far ahead of each other. For the more important changes they do accept, such as the four-wheel brake and finger gear shift, they follow tryouts first on a small scale in Europe, and when

³³⁰ With the single probable exception of wire recording. * 317.