tained, but not cheap manufacture of the trailer. If there were a basic patent on it, as there was once on the airplane and phonograph, that would be one way to attain quickly centralized production, standardization, and cheapness. Very likely not the *best* way to attain them, but one way, involving a wider monopoly than the present patents give. As for the prefabricated house, our Government's idea of being helpful was to file an antitrust suit against the one firm that had attained sizable production, 25% of the market.

[221] In smaller goods especially, it is possible for standardization to render unified ownership and production unnecessary, particularly if the Federal Government will enforce the standardization, as it has in television. "It's generally agreed that to a large extent the future growth of piggybacking depends on standardization of trailer, flatcars, and tiedown equipment." [238] The use of big freight containers, shifted between rail flatcars, trucks and ships, and refilled near their unloading point, could be much helped by standardization and wider control than today's (¶ 375).

[222] Fifth, *Inventions not assessable upon their beneficiaries*, i.e., which have to be paid for by a party who gets little of the benefit. Such inventions merge on the one side into scientific discoveries, with which they form an enormous group, unable to use patents, or unwilling to. Examples are a surgical procedure or simple apparatus, or a technique for ultrarefined measurement. On the other side this class becomes like ordinary inventions, except that they are more or less for the benefit of other parties than the contriver and/or builder of the invention, who has no good way to charge for his services, however welcomed and important. Examples are smoke and smog prevention devices, all those for obviating pollution of air or waters, or for wholesale eradication of pests or diseases, an automatic headlamp dimming system,[239] which is more for the benefit of the approaching driver than of the one who installs it, and many inventions for American railway freight cars, viz., all that cost money but serve to lighten the weight of the car or otherwise reduce its rolling friction, or its liability to trouble en route. With locomotives and passenger rail cars the case is different—we find in them roller bearings and all manner of improvements, because the same railroad that paid for their building and inventing, uses them throughout their life (or sells them for all they are worth to another line). But freight cars, 44 times more numerous than all in passenger trains, spend about half of their traveling time, and of their loadings and unloadings, on the tracks and at the expense of some other railway or shipper. So the railroads' motive to improve their operating characteristics, aside from durability, is diluted by half. If a freight car develops a hotbox for lack of roller bearings, and stops a whole train, like as not it will occur on the line of another company. There is also the factor of other railroads lacking facilities for servicing roller bearings, a matter of standardization. From these factors, one would think, stems the slow progress made in freight cars, inferior to that of passenger cars, though far more freight cars are built.

[239] An additional possible need, of universality for one system, is mentioned by Frost, quoting Maclaurin as saying in 1950 that no auto manufacturer had yet done significant work on this much needed invention. But now some devices are on the market, and RCA has been developing one for 5 years. After all, to help the approaching driver may save one's own life. Jos. M. Guilfoyle: The Idea Mills: Industry's scientists shape basic research to commercial ends; *Wall St. Jol.*, Mar. 13, 1957. For Frost see N 221, in his note 17 on p. 7.