devise further improvements on A's art. But none of the later comers, B-E, can practice their improvements unless A, the basic patentee, can be persuaded by money or otherwise to sell his patent or to grant them licenses to compete with him, and with each other. Their alternative of waiting perhaps 17 years or more for the basic patent to run out, is a very poor alternative, from either the economic or the business point of view. On his part the basic patentee cannot practice his invention well without the improvements if patented, very likely cannot afford to practice it at all, and has no way to force a license or sale from the improvers. There results on impasse, which the parties seek to untie by any various methods. One or both rival firms may pay for a license on the other's patent, or buy it, or buy control of the firm. Or, especially where the parties are several, they may make a general agreement to cross-license each other on all or a field of patents and know-how, present and perhaps future too, with or without royalties, creating a patent pool.

[282] But with all these remedies, constantly used, none is easy to apply, because they all require the sale or barter of things on which there is no market price. In each case the license (or the wider privilege bought) is worth more to the buyer than the seller loses in selling; so there is a range of indeterminacy between the least the seller would take and the most the buyer would give, a no-man's land to be struggled over, and won in larger or smaller part, by bargaining skill, bluff, lying, and financial power to threaten patent litigation or other penalties. It is hard to strike a bargain where there is no market price for guide, no other way to estimate the values to each party; the parties are perhaps habitual rivals and foes, and each can hope to

win more (with luck), if it fights harder or holds out longer.

[283] A grave result of these difficulties is that all potential inventors confronting a basic patentee are motivated to resign the field to him, and not even try to improve his invention. For any attempt to use an improvement, patented or not, is likely to plunge the improver into an infringement suit, perhaps based on a dozen patents, not one, if the basic patentee have a thick portfolio of them tying up a whole industry, as did the shoe machinery trust until it was recently smitten by Compulsory License. If instead of fighting they try to strike a bargain, they face all the difficulties of agreement cited above, plus in the monopsony case an inferiority of bargaining power. Thus arises a serious restriction of the field for inventors of all but one corporation or cross-licensing pool, and an accentuation and perpetuation of monopoly, when it comes about that all the improvements and their patents are in the same hands, enabling indefinite perpetuation of an industrial monopoly.

[284] We shall speak again of these difficulties, when treating of patent pooling, and compulsory license, by which nowadays courts in the antitrust cases often set aside the patent system and throw open long strings of patents to compulsory licensing, or even to free use (ch. 10, sec. 13, 14). Some foreign countries attempt to deal with the problem of mutually blocking patents by special provisions in their law, e.g., for compulsory mutual license.

[285] 13. Invalid and improper patents. A patent attorney, Eyre,

wrote "Most of our patents are either not based on any real invention, or are worthless because the invention is improperly described or