

3. contd.

vaporize and expel the pellet from the barrel. Many CO₂ guns, both rifles and handguns, are of the repeating, automatic-feeding type, and they are growing rapidly in popularity in the U. S. market. Some guns use the CO₂ chamber pressure to operate the feeding mechanism, and, hence, consume considerably more CO₂ than those which use only CO₂ for propulsion. The shooter's cost per shot can be more than a penny, including pellet and CO₂, which makes the potential of the pellet ammunition business comparable in dollar volume to .22 shorts for the same amount of shooting.

To be a factor in the pellet gun market, we would have to consider a line of guns as opposed to a single entry. Otherwise, we could not expect to take advantage of our distribution strength by displacing other lines less satisfactory to the trade. The minimum line should include both rifles and handguns (probably both pistols and revolvers) and should logically include both spring-actuated and CO₂-actuated models, the latter being available as both single shot and automatics or repeaters. It is not essential that the gas-powered guns employ CO₂; some other gas might be more advantageous, but we have no candidate to suggest at this time. 83

The reason for suggesting both spring-actuated and CO₂-actuated guns is that some of the same parts might be used in both guns; for example, the pressurized chamber which would contain the CO₂ cylinder in one model could be used to contain the spring and piston in a spring-actuated model. Thus, the lines, frames, and stocks of the guns could be similar, although the trigger actions would necessarily have to be different. We do not recommend a pneumatic rifle or handgun because of the very large number of parts involved and because the inconvenience and awkwardness of cocking these guns in the field portends lower sales volumes and lower consumer acceptance.

If suitable design concepts can be evolved to provide a line of guns having enough related parts, it becomes more likely that attractive investment economics can be obtained. In this connection, it should be pointed out that our preliminary