which makes possible greater precision in the setting up of heading machines and consequently results in a higher degree of uniformity in this dimension in the finished product. The benefits derived from the use of this technique have been fully demonstrated and additional improvements are expected when the desired control over the variability of the basewad weight is achieved. Some mechanical improvements in the wad winding operation are yet to be effected before full benefits are noted in the headed shell.

Project: Battery Cups
Personnel: R. A. Robertson, E. M. Walker, J. H. Gurbach, W. L. Gore

The process for the manufacture of our regular #57 copper plated steel battery cup has been carefully studied and the indicated revisions to improve overall quality and make simpler the production task have been completed. The results of part of this work are already being noted in the shop and further quality improvements will be possible.

Project: 20 Gauge Remington Express
Personnel: R. A. Robertson, E. M. Walker, J. H. Gurbach

By a redesign of critical tools, one draw operation has been eliminated and manufacture is now proceeding under the new process calling for cupping, annealing and final draw cutoff. The quality of the resulting product is equivalent to that made on the more expensive process. Development work of the same nature is under way on 16 and 20 gauge High Velocity caps.

Project: 10 Gauge Very Signal Shell
Personnel: R. A. Robertson, E. M. Walker, J. H. Gurbach

This shell has been completely redesigned and is now being manufactured after successful tests at this plant as well as the plants of the loading facilities. The new product is equally good in quality and is simpler in design and less expensive to manufacture.

Project: Peters Type Assemble, Head and Prime Machines
Personnel: R. A. Robertson, E. M. Walker, J. H. Gurbach

Existing equipment of Bridgeport type entails separate assemble, heading and priming operations. The process as used at Kings Mills involved a wad winding and wad assembly operation and an assemble, heading and priming operation. Since a manufacturing cost advantage exists in the use of the Peters type of process, the Peters heading equipment has been adapted to the manufacture of 12, 16 and 20 gauge Shur Shot and Victor shells. Processes for the manufacture of the above mentioned shells have been incorporated into our production line.