

Nature of Problem:

Development work has been started on a machine which will combine the operations in the assembly of shot shells from five present operating machines.

Summary of Progress from Inception:

An outside engineering concern has reviewed the problem and recommended the type of design for the proposed machine. They have conducted additional experimental work to determine if certain operations can be further combined and simplified making a simpler machine with less operating stations.

This Quarter's Work:

Experimental work has been carried forward and completed to combine half heading, head stamping, piercing and forming the primer pocket in one station. Samples of shells made using components produced in this way were fired and functioned successfully.

Proposed Next Quarter's Work:

Additional experimental work in more detail is proposed before this process can be considered proven and tests have been arranged at Bridgeport using the tools developed and the know-how of the Engineering Consultants. This work is to be conducted by the Process Engineering Unit.

Project: Shot Shell Protective Liner - (Piston Plus B-339; L-3091)  
Personnel: W. S. Reynolds

Nature of Problem:

The Chemical and Metallurgical Group, working on Piston Plus development, requested that a plant machine be changed to wind corrugated base wad paper so that a satisfactory protective liner could be made in the Piston Plus shell.

Summary of Progress from Inception:

Alterations to the machine were designed, and the machine was changed.

This Quarter's Work:

The above work was done during this Quarter. The machine was placed in operation, but additional work is yet to be done to do corrugating of the base wad paper on the machine.

Proposed Next Quarter's Work:

No work contemplated.

Project: Paper Tube Process Improvements - RX-B-3807  
Personnel: L. H. Messinger  
Authorized Amount: \$61,200 Total Expended to Date: \$27,498

Nature of Problem:

Experimental work is well under way to improve winding,