Firing Pin Blow (Model 720) - (TP-3388) \$4,250 Primer Set-Back Autoloading Means (TP-3389) 7,200 Investigation of Induction Heating and Austempering (TP-3403-9) 500

# MECHANICAL EXPERIMENTAL SECTION, J. K. HAMIL, MANAGER

### General:

All Mechanical Experimental machine development work listed herein is being done by the Machine Development Group of the Industrial Engineering Division with the exception of the Shot Shell Assembly Machine which is being done by an outside engineering concern.

# Bridgeport:

### Shot Shell Area

Project: Shot Shell Head Manufacture - RX-B-3809

Personnel: L. J. Lewis

Authorized Amount: \$2,000 Total Expended to Date: \$1,759

### Nature of Problem:

A study is under way to determine the most economical method of manufacturing shot shell heads.

## Summary of Progress from Inception:

It indicates that blanking, cupping and drawing in one operation from an 8" strip with a subsequent cutoff and then finishing this head in the combined assembly machine results in the lowest cost manufacturing method.

#### This Quarter's Work:

The Process Development Unit has conducted development work on combining blank, cup, and draw in one operation which has proven successful on Shur Shot and Remington Express heads. They do not believe, however, that blank, cup, draw and cutoff operation is feasible or that a separate trim operation would produce as good a quality as a draw, cutoff operation.

Proposed Next Quarter's Work:

Further work will be done to evaluate the work done to date and to determine the future course of action.

Combined Shot Shell Assembly Machine - RX-B-3812 Personnel: Machine & Tool Designing Company, L. H. Messinger Authorized Amount: \$5,000 Total Expended to Date: \$4,070