torily on short experimental runs and is, at present, installed in the Rim Fire Area for production tests.

This Quarter's Work:

The machine was installed in the Rim Fire Area for production tests. The unit was passed by Safety and Explosives Committees. Tests and preliminary production runs were started; minor difficulties were encountered which are being corrected, and no large scale production run will be contemplated until certain parts of the machine have been proved adequate. Most of the difficulty is in abrasion and wear on parts from the ground glass in the mixture.

Proposed Next Quarter's Work:

It is proposed to continue development of research on parts using other materials of construction in order to reduce wear.

Project: Automatic Caliber .22 Rim Fire Loading and Finishing Machine - RX-B-3806
Personnel: W. S. Reynolds
Authorized Amount: $16,500 Total Expended to Date: $12,606

Nature of Problem:

The machine is under development for combining loading and finishing operations in the manufacture of rim fire cartridges. The present objective is to incorporate in the machine primed shell inspection, loading, bullet swaging, lubricating and packing so that rim fire cartridges might be completed in one machine after the priming operations.

Summary of Progress from Inception:

Design has progressed on this machine to the point where layouts are now complete in all of the operational units, and an additional print is being drawn up to complete final design and construction of machine for experimental tests.

This Quarter's Work:

During this past Quarter the crimping, lubricating, and packing stations were completed and work was started on the additional part to the project.

Proposed Next Quarter's Work:

It is proposed to complete the additional part of the project and submit it for approval and continue development.

Project: Rim Fire Lubricating Machine - RX-B-3818
Personnel: J. K. Hamil
Authorized Amount: $3,000 Total Expended to Date: $1,422

Nature of Problem:

Work has been started to develop an improved machine for lubricating rim fire cartridges and placing them in cartridge trays.