486 jobs were completed in the Experimental Shop as compared to 447 for the previous Quarter and at the end of December there were 60 jobs in process. A large percentage of this work was conducted on All Metal Shot Shell, Hot Extrusion of Caliber .50 Aluminum Case, Caliber .60 Electric Primer and Caliber .22 Hollow Point Bullet. With the addition of Technical personnel, additional shop work has been required which necessitates the addition of personnel and equipment. Three lathes and one internal grinder have been purchased and the shop has been rearranged for additional equipment and personnel when they arrive.

## Ilion:

## General

Machine Development Program:

A program has been drawn up on which work is being started to conduct Machine Development Studies and develop and design special machinery as recommended in the Arms Survey and listed in Sub-Report #RI-181-H under Equipment. Each individual recommendation will be examined and separate experimental projects written for the proposed work.

Draw Rifling: (D. P. MacMurray)

The Mechanical Experimental Section is collaborating with the Research Unit at Ilion in providing equipment for experimental work on commercial draw rifling on 500 Series guns.

Project: Wood Shop Studies - RX-I-1
Authorized Amount: \$5,000 Expended to Date: \$500

Nature of Problem:

A study has been started in the Wood Shop in Ilion to determine ways of making economies in the manufacture of wood components.

Summary of Progress from Inception:

An experimental project has been drawn up and approved to conduct this work.

This Quarter's Work:

No progress because of lack of personnel.

Proposed Next Quarter's Work:

No progress contemplated because of lack of personnel.

Project: Model 11 Shotgun Stock Checkering Machine - RX-I-2

Personnel: G. R. Melick

Authorized Amount: \$10,000 Total Expended to Date: \$790

Nature of Problem:

Work has been started on the development of the checkering machine to checker automatically the Model 11 shotgun stock.