caliber .50 steel pistol cartridge cases, but before tooling was completed or any tests run, contracts for caliber .50 ammunition were cancelled, and the machines retooled for caliber .30 carbine. Preliminary tests showed a satisfactory quality was produced in this machine with slight improvement in head thickness quality. Additional production tests showed up minor machine difficulties which required correcting. A final test was run which established machine efficiency at 83% average over a five day period.

### This Quarter's Work:

During this Quarter a temporary process record has been issued for use of the machine. This record was issued by the Operating Department. One or two additional minor defects have developed after this additional continued use which are being corrected.

### Proposed Next Quarter's Work:

Prices have been obtained for additional machines. The final report is being written, and recommendations are being made with reference to additional units of this type.

<u>Project</u>: Electrical Ignition - TP-3411 <u>Personnel</u>: W. S. Reynolds <u>Authorized Amount</u>: (See Research Unit) <u>Nature of Problem</u>:

Two special purpose machines and a testing attachment for the Henry & Wright priming machine are being developed in conjunction with the development work conducted by Research for Ordnance Department for assembling special primers and testing them after assembly.

### Summary of Progress from Inception:

Both units have been designed. Construction on the testing unit has been completed. The assembly unit is nearly completed, except for the electrical equipment.

# This Quarter's Work:

During this Quarter the testing unit was completed and construction nearly finished on the assembly machine.

## Proposed Next Quarter's Work:

It is proposed to complete remaining work and to place the units in operation.

#### Experimental Shop (R. R. Carey)

This unit designs and constructs most of the experimental tools, gauges and test equipment used by the Chemical & Metallurgical, Explosives, Product Development and Product Engineering Groups in the Technical Division. During this Quarter

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