

December 30, 1955

There appears to be no problem with other loads in compensated guns, including our own Remington and Peters trap loads. Also, there appears to be no problem of operation with the Western and Winchester light trap loads when fired with plain or vent rib barrels. It may be possible to gain additional power through reduction of gas leakages. This is being considered but may involve use of closer tolerances and perhaps gas seals.

A M/11-48 with a compensated vent rib barrel was fitted with a recoil spring having minimum specification weight, and submitted to limited firing. It appears to handle these light competitive loads provided the Magazine Tube is well lubricated. A new Higgins Model 60 Gas Operated Shotgun was also test fired after installing a Cutts compensator. It would not function with the light competitive loads and indicated less "power" under these conditions than for the Sportsman-58. The Winchester Model 50 was given a similar test and appears to function satisfactorily. This was anticipated after checking the time and pressure curves for these loads, which appear to be "tailored" well for the Model 50 type of operating mechanism.

Power Cone Development

The design of the power cone is modified to meet the appearance requirements in accordance with decision at the last meeting. It was found necessary to depart slightly from the form of knurling used on the outside. A new sample is available. Design testing has been continued utilizing the seven (7) original guns since there are dimensional requirements which prevent the Power Cone from being used interchangeably with the Dial-A-Matic cap. These involve principally the dimensions of the piston.

The D.E.D. Engineers have also continued work with the original design of the Sportsman-58, having devised a sliding button on the right side of the Receiver to release the Action. Through a slot in the Receiver, this Slide engages the Magazine Follower to release the Carrier and close the Action. Another refinement was made to the Magazine Follower to prevent the Carrier from being "trapped" above the tip of the Follower in manual operation.

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