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TO: G. O. Clifford (3)
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FROM: H. A. Brown

SUBJECT: MODEL 721-722 STANDARDIZATION OF COMPONENTS AND TOOLING

By careful attention to standardized design of components and of tooling, a relatively high degree of standardization has been achieved. The policy of standardization was established in the Arms Study and is being reduced to practice in all new models. The result of diligent adherence to this policy as it applies to the Model 721 and 722 development may be of interest.

Component Standardization

The proposed 5 Model 721 and 722 guns (300 Mag., 30-06, 270, 300 Savage and 257) contain 280 components, -- each gun is composed of 56 different components.

We can produce these 5 guns, however, by manufacturing only 71 different components and therefore have achieved a degree of standardization which may be expressed as 79% (56/71).

Jig and Fixture Standardization

With no standardization of this type of tooling a total of 2735 jigs and fixtures will be required for 5 guns. The basic gun requires 547 jigs and fixtures. We can produce 5 guns, however, with 569 jigs and fixtures therefore have achieved 96% standardization (547/569).

Gauge Standardization

The basic gun requires 384 gauges and with no standardization 5 guns would require 1920 gauges. We can produce these 5 guns, however, with 435 different gauges and therefore have achieved 88% standardization. (384/435).

Cutting Tools

By similar reasoning we have achieved 82% standardization in cutting tools.

G. O. Clifford

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July 18, 1946

Summary

Components	79%	Standardization
Jigs and Fixtures, etc.	96%	"
Gauges	88%	"
Cutting Tools	82%	"

After the engineering of the Model 760, 761, 740 and 721 is completed we shall find further standardization of components and tooling in addition to that which now exists in the Model 721 and 722. As this information becomes available we shall undertake further reports of this character.

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