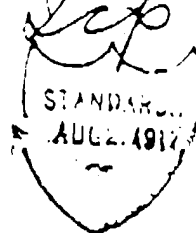


PHW
HR

E. G. N.



August 21, 1917.

Equipment Division,
Office of Chief of Ordnance,
War Department,
Washington, D. C.

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Gentlemen:

In reply to your letter of August 7th regarding (helmet paint) and in further reference to your letter of August 3rd and our reply of August 8th on the same subject, it may be said that considering the letter of June 26th from Sherwin Williams Co. it is believed that the Government formula referred to is to be preferred to that suggested by Sherwin Williams Co., for the reason that lithopone is a pigment not adapted to outside exposure. It is believed that equally good service can be had from a paint containing a cheaper pigment and of much simpler composition than either of the paints suggested.

Such a paint can be made from ocher with a small amount of lampblack to produce the desired color. For such work it is believed that the helmets should be baked after applying the paint. If this can be done the vehicle can be simply linseed oil with drier and volatile thinner. Such a paint can be easily made from ocher in oil thinned with drier and turpentine, or mineral spirits, which is cheaper and equally satisfactory. It may be said in this connection that the helmet you sent with your letter of August 7th is painted with an ocher paint containing no lead or zinc pigment, and from the character of the coat appears to have been baked.

Enclosed find a sheet of steel which has been painted with a paint made from ocher, lampblack, linseed oil, liquid drier and turpentine, containing about 58% pigment and about 42% linseed oil. One coat of this paint was brushed on, baked for 30 minutes at 130°C., cooled, a second coat applied, sprinkled with sand, and baked for 30 minutes at 130°C.

If you desire to purchase a ready mixed paint of this character we will be pleased to draw up a specification, but before doing this we will have to know the method of application, since the proportion of volatile thinner will vary depending upon the method of application; that is, whether the paint is applied by brushing, spraying or dipping.

Respectfully,

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