

Circular No. 790

# Preserving Cotton Fabrics in Outdoor Use

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## PREFACE

The usefulness of cotton cloth on the farm would be increased if it remained serviceable longer. In addition to the mechanical damage expected from ordinary use, cotton goods become weakened if exposed continuously to the weather. Sunlight and mildew are the chief causes of this deterioration.

The cloth can be protected from the harmful effects of sunlight by treatment with mineral pigments or other materials that have the power of absorbing certain light waves. The danger of mildew can be reduced by treating the cloth with compounds that lower its capacity to absorb moisture, or, occasionally, by adding substances that are poisonous to micro-organisms.

This circular gives information about the properties, selection, and care of cotton duck and lighter fabrics for farm use and describes the preparation and application of several treatments that have been found to give effective protection to such fabrics when they are exposed to weather.

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### USES OF COTTON FABRICS

Woven cotton fabrics ranging from heavy duck to light shade cloth find many uses on the farm or ranch, although probably their chief function is to protect farm equipment and products from rain, sun, and dust. Coverings for machines, trucks, automobiles, sacked grain, and stacks, covers for horses, shade for young plants and seedlings, use in tents and awnings are some of the farm duties performed by cotton goods. No doubt they would be used to a greater extent if they fulfilled more effectively these various purposes and if they retained their serviceability longer.

This circular tells how to select and care for cotton duck and lighter fabrics on the farm, and describes simple methods for prolonging their serviceability by the application of waterproofing and weatherproofing treatments. It should be noted that the protective finishes recommended are designed primarily for use on shelter and cover cloths. They are not suitable for garment fabrics or for grain and vegetable containers.

### CLASSES OF COTTON DUCK

"Duck" is a term used in this country to denote a range of firm, heavy cotton fabrics, all of plain weave. The name is said to owe its origin to the stenciled figure of a duck that identified the heavy-

<sup>1</sup> This circular supersedes Farmers' Bulletin 1157.