

<sup>l. S.</sup> DEPT. OF COMMERCE <sup>V.</sup> Averell Harriman, Secretary

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# COTTON GINNING MACHINERY AND EQUIPMENT IN THE UNITED STATES - 1945



Prepared under the supervision of RAY HURLEY

Chief, Agriculture Division Bureau of the Census

DEPARTMENT OF COMMERCE

W. AVERELL HARRIMAN, Secretary

BUREAU OF THE CENSUS

J. C. CAPT, Director

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## **COTTON GINNING MACHINERY AND EQUIPMENT: 1945**

History.—The first special census of cotton ginning machinery and equipment was taken in 1935. This census was repeated in 1940 and in 1945. Each of these censuses has included an inventory of the principal types of cotton ginning machinery and equipment existing in cotton-gin installations at the time of the census. The census of 1945 was taken under the supervision of Ray Hurley, Chief, Agriculture Division, and George W. Potter, Technical Assistant. V. L. Stedronsky of the Cotton-Ginning Laboratory of the United States Department of Agriculture rendered valuable technical assistance in connection with the checking of the data.

Method of Enumeration and Tabulation.—The 1945 Census of Cotton Ginning Machinery and Equipment was planned at the end of the calendar year. The actual enumeration was performed by special agents who collect cotton-ginning statistics, and the census was taken by these special agents during their preparation of the final report on cotton ginning in March 1946. These special agents secured the information required by the reporting form on Cotton Ginning Machinery and Equipment during a personal visit to the cotton gin. A facsimile of the reporting form is given below.

When the reporting forms were received in Washington, they were checked against a complete list of cotton gins to insure that reports had been secured for every cotton gin. During the editing process, the report for an individual gin was compared with the report for the same gin in 1940. Tabulations were prepared by counting or adding the reports for all cotton gins in each county.

Presentation of Statistics.—The tables giving summary statistics by States are presented first in this report, and these are followed by seven tables giving statistics by counties. In cases where there were a small number, usually less than three cotton gins in the county, the figures for all such counties have been combined and published as "All other counties."

Accuracy of the Data. - The data were obtained from the operators of cotton gins by special agents experienced in the collection of statistics on cotton ginnings. Reports were secured for all cotton gins in existence at the time of the census. However, the nature of the census required a rather thorough knowledge of cotton-ginning machinery and equipment by the owner, operator, or other person who supplied the information for the individual cotton gin, as well as by the special agent who conducted the enumeration. While the reporting form was kept as simple as possible, the checking of the data against those reported for the two previous censuses indicated that the results of the three censuses were not always fully consistent. In some cases, cotton-gin owners or operators may not have been sufficiently informed as to the type of machinery and equipment in their cotton gin to provide accurate information. In other cases, the results may have been affected by the interpretation of the cotton-gin operator and of the special agent as to the classification and characteristics desired for specific types of machinery and equipment.

Number of Gins. — Of the 10,836 gins in the United States in 1945, 8,554 were active and 2,282 were idle (i.e. ginned no cotton during the season). The number of gins relates to the number of cotton gins in existence in March 1946. Cotton gins that were burned, dismantled, destroyed, etc., during the ginning season and prior to March 1946 were not included in the census. The total number of gins decreased 17.1 percent for the five-year period 1940 to 1945 as compared with a decrease of 9.3 percent for the five-year period 1935 to 1940. The most probable reasons for the accelerated rate of decrease of gins in the five-year period 1940 to 1945 were the diff!culties in obtaining repairs and the shortage of manpower for their operation. All cotton-producing States showed a decrease in the number of gins, with Florida, South Carolina, and Georgia showing the largest percentage decrease, these being 49.0 percent, 26.8 percent, and 23.4 percent, respectively. It may be noted that the number of multibattery gins has decreased by approximately 150 during each five-year period since 1935.

Ownership of Gins.—Cotton gins were classified according to ownership on the basis of the reply to the ownership inquiry on the reporting form. The number of gins operated by all classes of owners decreased during the period 1940 to 1945, with the largest percentage decrease occurring in the number of gins operated by corporations and governmental agencies.

Kinds of Power.— Diesel power is apparently becoming more and more important, although the number of gins operated by each kind of power has decreased since 1940. Those gins operated with Diesel power decreased only 0.5 percent; electrically powered gins, 3.1 percent; steam-powered gins, 51.2 percent, water-powered gins, 45.5 percent; while gas-engine-powered gins decreased 13.0 percent during the five-year period since 1940. Gas engines include engines operated by gasoline as well as natural gas.

Total Ginning Capacity.—Total ginning capacity for the United States per day, based on a 12-hour shift, has decreased 13.2 percent since 1940 and 17.5 percent since 1935. The average capacity per gin has increased since 1935 as the gins going out of existence have been the small gins.

Types of Gins and Equipment.—Except for 33 roller-type gins, all cotton gins in the United States are of the saw type.

Number of Gin Stands Per Gin.—The number of ginneries in each group, classified on the basis of the number of gin stands, decreased during the period 1940 to 1945. Gins with one stand decreased 55.2 percent; gins with two stands, 13.4 percent; gins with three stands, 10.5 percent; gins with four stands, 9.1 percent; gins with five stands, 14.3 percent; and gins with six or more stands, 27.3 percent.

Number of Gins Reporting Specified Kinds of Equipment.—In State tables 6 and 8 and county table 6, figures are given on the number of gins that reported various kinds or types of equipment.

### REPORTING FORM, CENSUS OF COTTON GINNING MACHINERY AND EQUIPMENT: 1945

Cotton 6-0948 - Revised		Approval Expires June 30, 19			
	DEPARTMENT OF Bureau of the				
COTTON GINNING MACHINERY AND BQUIRMENT (March 1946)					
Pile Number					
Name of Gingery					
Reme of Giraery					
Location of Gin: In con	porate limits of	town			
	-				
OT	ection)	(nearest post office)			
Conner	31216				
County					
County		-			
THIS IS TO CERTIFY		ntained in this report is complete and			
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THIS IS TO CERTIFY					

_	COTTON GINNING MACHINERY AND EQUIPMENT- (March 1946)
1.	Type of ownership: Individual Partnership Corporation
	Is this plant operated as a farmers' cooperative gin? Yes . Ho .
3.	Type of power: Steam Water Diesel Gas or gasoline engine Blectric Check item
4.	Rated borsepower of motive unit:borsepower.
5.	Type of gin: Saw O or Roller O; Brash O or Air Blast O; Huller O or Plain
	Frames: Wood O on Metal O. Stories in Gin Building: 1 1 14 0 2
6.	Gim stands: No; Saws per Gim Stand; Diameter of Saws
••	Med &1E States Siece 13405 No
8.	Press: Screw   Hydraulic   Round Bale   ; Press Box: Single   Double   ;
	Trampor: Steam Mechanical ; Ram: Up-pack Down-pack
9.	Other equipment: Seed-cotton Drier
	Cleaning Fooder Drum: Small   Rec   . Hall Bare
	Distributor: Belt Screw Other or Pagematic Slevator
	Condenser Dyum: Single   Double
	Scales: Seed Cotton Seed Bale
11.	Special system for pure seed; Bolt Air-pipe Gravity Chute Other C
12.	Capacity: Ginning for 12 hrs. (Bales)  (Bales)  Seed Cotton