## A GRAPHIC SUMMARY CHORE EQUIPMENT

Human labor is the oldest form of power in agriculture. Even after a hundred years of the development of labor-saving machines and practices, much farmwork remains to be done by hand or with small hand tools. A large part of this handwork is used for feeding and caring for livestock, although even in this field of work several important labor-saving machines and practices have been put into effect on many farms. The extension of central station electric service to almost 95 percent of the farms has made possible the use of many kinds of electrical equipment in service buildings and service areas. Many of these pieces of equipment, such as tool grinders, portable drills, and circular saws, require little electric power for operation. Other items, such as crop driers, may require motors of 7.5 and even 10 horsepower. The livestock chore equipment discussed here is limited to only three items, namely, milking machines, power feed grinders, and electric pig brooders. These are the items of chore equipment reported for the 1954 Census of Agriculture.

## MILKING MACHINES

Dairy farmers generally have accepted the milking machine as a necessary item in the barn or milking parlor. The number of farms with milking machines almost doubled between 1945 and 1954, increasing from 365,000 to 712,000. Most of this increase came between 1945 and 1950, a period when electric distribution lines were being extended rapidly in rural areas and when many farming areas were experiencing labor shortages.

The number of farms reporting milking machines in the southern area, where dairying is expanding, increased from 6,000 in 1945 to almost 35,000 in 1954. Although the number of milking machines in the Southern States still is small, the rapid increase does indicate considerable progress in dairying in this part of the country.



Milking machines are concentrated in the areas that produce whole milk for sale. Farms of the central and eastern areas produced three-fourths of the milk sold by farmers in 1954 and had three-fourths of the milking machines reported.

Wisconsin, the leading dairy State, with 2.2 million milk cows and more than 14 billion pounds of milk sold in 1954, had 100,761 farms with milking machines. Minnesota with 74,000 farms with milking machines and New York with 51,000 followed in order of number of farms reporting. Dairy farms in California frequently have large herds of 100 or more cows. Farmers in California sold about 8 percent of the whole milk sold in 1954 and had only 2 percent of the farms with milking machines.

Several types of farms other than dairy farms have milk cows varying in number from only a few head to sizable herds. Consequently, milking machines are used by many farmers who are not classified as dairy farmers. Of the 712,000 farms reporting milking machines in 1954, more than 300,000 or 44 percent were classified as other than dairy farms. Livestock farms other than dairy and poultry farms accounted for 13 percent of all farms with milking machines, and general farms, many of which have milk cows, accounted for another 13 percent. Dairy farms, and other types with milking machines are especially numerous in the central area. In the Great Plains area dairy farms having milking machines are only half as numerous as other types of farms which reported milking machines.



NUMBER OF FARMS WITH MILKING MACHINES, BY TYPE OF FARM FOR UNITED STATES AND AREAS: 1954



Milking machines are now generally used throughout the country on farms with 10 or more milk cows. Seventy percent of the commercial farms with 10 to 19 milk cows in 1954 reported a milking machine while 90 percent of the farms with 20 or more milk cows reported a milking machine. In recent years many farms with small herds of milk cows have turned to machine milking. Estimates made by the United States Department of Agriculture show that only 7 percent of the milking machines on January 1, 1943, were on farms where less than 9 cows were milked. In November 1954 according to the Census, almost onefourth of all commercial farms reporting milking machines had 1 to 9 milk cows. About a fourth of these were farms having less than five milk cows. Most of the older milking machines on farms are of the two-unit type. The operator carries the milk to the milk room and pours it into a milk can. Recently, however, dairy installations of pipeline milkers and bulk coolers have been increasing rapidly. By this method the milk is handled entirely by mechanical means. It is another step in the mechanization of farm chore operations and has reduced the time used to milk a cow and has made the work much easier.