or the relation between these and the equipment of the plants, except insofar as some of these points are covered briefly in charts and summaries following. The purpose is rather to show for the information and benefit of the canners of the state what the conditions were during the past season, especially in regard to the hours of labor for the women employes; to present a fair picture of the abuses that existed, the special needs for regulation, and the specific points that must be considered in attempting to solve the problem for the future. Most of all, it is hoped to show what has been accomplished in the way of improved conditions, and arrangements of hours in compliance with the law or in advance of legal requirements.

Present regulations.

Pursuant to the authority vested in it by the laws of 1913, Chapter 381, the Industrial commission appointed a committee representing the pea canners, the labor interests and the consumers, to investigate the hours of labor of women in the pea canning industry, the conditions surrounding such workers, and the effect upon them of such hours and conditions of labor. The committee was requested to recommend to the Industrial commission the regulations to be enforced during the 1913 season, covering the hours of labor of the women employed in pea canning factories. This committee was composed of the following members: Mrs. B. C. Gudden, Oshkosh, and Mrs. Edward Rissman, Milwaukee, representing the public; Frank J. Weber, Milwaukee, representing the Wisconsin State Federation of Labor; W. C. Leitsch, Columbus and M. S. Bailey, Chippewa Falls, representing the Wisconsin Canners' association; A. H. Christman, Menomonee Falls, representing the pea growers, and Miss Emma O. Lundberg, deputy, of the industrial commission. Two all-day sessions were held by this committee, and the regulations recommended as finally approved by the Industrial commission are as follows:

Order No. 1. In pea canning factories where the laws regarding safety and sanitation and the orders of the Industrial Commission issued thereunder are complied with and where due provision has been made for handling the crop, women who are employed in such factories may be employed not to exceed ten hours each day between the beginning and ending of work, exclusive of meal hours, between the hours of 7 o'clock A. M., and 10 o'clock P. M.

Order No. 2. During the rush season, when abnormal conditions prevail by reason of breakdowns, bad weather or climatic changes, women who are

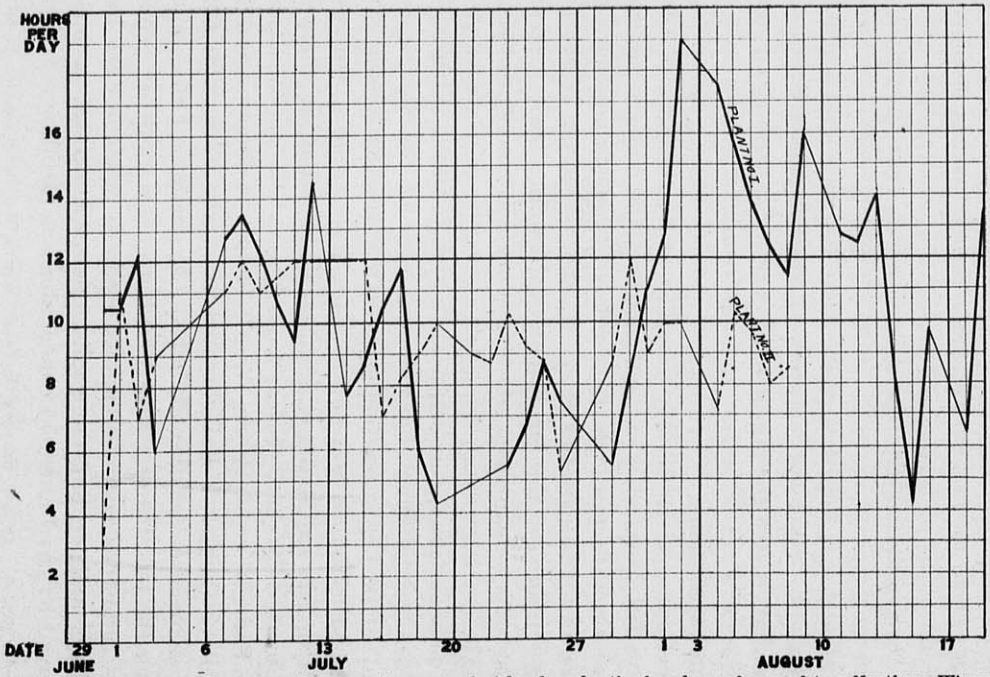

Chart No. II.—Showing the range of average hours worked by days by the female employes of two Northern Wisconsin pea canneries during the 1913 season. Plant No. II kept within the legal limits while Plant No. I worked as high as 19 hours on one day. (The light sections for Plant No. I and the continuous sections of line for Plant No. II represent days not working.)

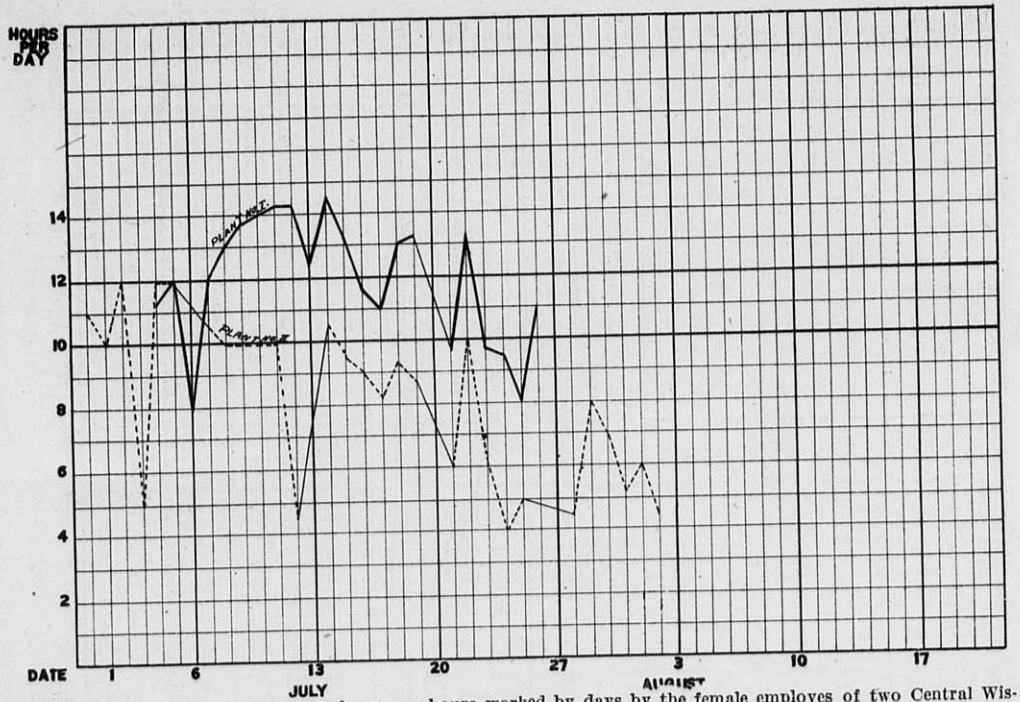

Chart No. III.—Showing the range of average hours worked by days by the female employes of two Central Wisconsin pea canneries during the 1913 season. Note the continuous stretch of long hours worked by plant No. I. (The light sections of line for Plant No. I, and the continuous sections of line for plant No. II represent days not working.)

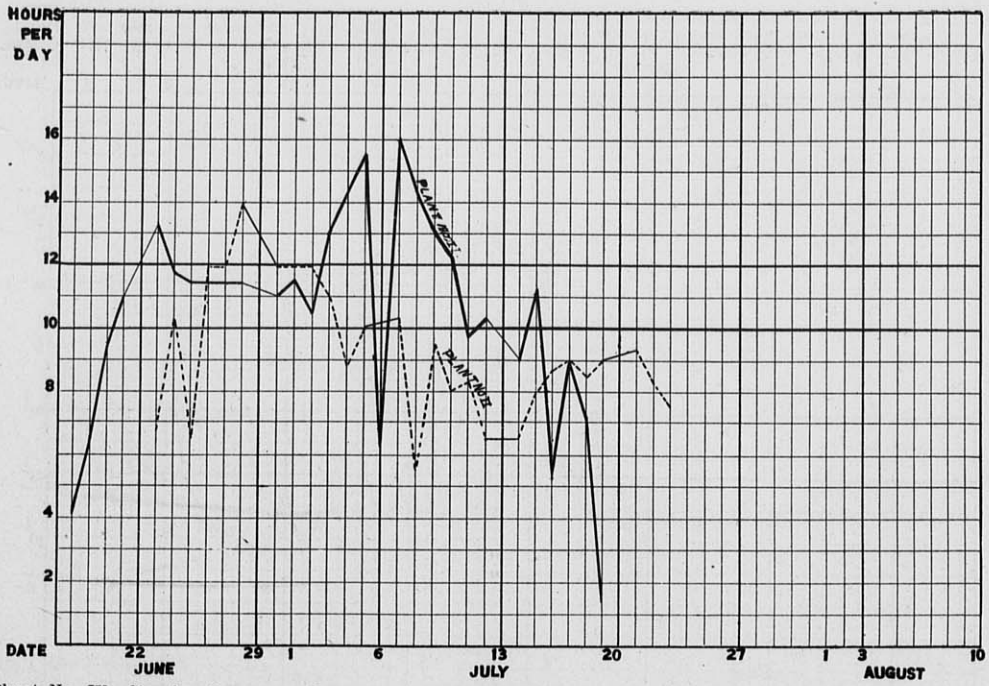

Chart No. IV.—Showing the range of average hours worked by days by the female employes of two Southern Wisconsin pea canneries during the 1913 season. (The light sections of the line for Plant No. I and the continuous sections for Plant No. II represent days not working.)

actually engaged in the process of canning may be employed not to exceed twelve hours each day from beginning to ending of work, exclusive of meal times, between the hours of 7 o'clock A. M. and 12 o'clock P. M., provided, that such twelve hour days shall be limited to fifteen in any one year, and provided further that time and a half pay shall be given for all time worked over ten hours a day and fifty-five hours a week.

Order No. 3. Correct permanent records shall be kept at each plant, subject to the approval of the Industrial Commission, and open for inspection at all times.

Order No. 4. Copies of these regulations shall be posted in at least three different places in each factory.

These regulations were issued by the Industrial commission June 11, 1913, and applied to the season of 1913 only.

The industrial commission proceeded to secure information covering the operations of the season, especially in regard to the hours of labor of the women employes. All of the seventy-five pea canning factories in the state were visited at least once during the season by deputies of the commission, and inspected for safety, sanitation, child labor and women's hours. These inspections were in line with the work done in all industries in the state to secure enforcement of the laws regulating conditions and hours of labor, but special reports were also made by the deputies on matters of particular importance to the canning industry, such as labor supply, difficulties in regulating output, and efforts made to comply with the regulations. The following sections relating to sanitation and safety orders and violations and prosecutions under the child and women labor laws, indicate the nature of this work.

In order to secure complete data as to hours of employment and the number and occupations of the female employes, weekly time blanks were sent to all of the pea canning plants to be filled out by them according to their records. This information was not used for purposes of prosecution, owing to the way in which it was acquired. It was designed to give information showing as accurately as possible the hours of employment, variation in amount of labor used, occupations of women workers, a comparison of factories in the same or different parts of the state, and especially to indicate grades of compliance with the present regulations and the possibilities of outlining definite restrictions. In addition to this information, the canners filled out blanks covering questions relating to equipment, acreage, planting regulations, methods of reducing congestion, and the labor supply available. Information was given by all of the pea canning factories in the state em-

ploying women,—a remarkable showing of coöperation and appreciation of the fact that their own interests will be advanced by a fair working out of the problem.

Average hours of work.

In the seventy-four plants employing women. the average hours of work of the women employes during the season were as follows:

Pickers, 8.6 hours,—Inspectors, 8.2 hours,—Cappers, 8.8 hours. The average for the season in all occupations was 8.6 hours. It will be seen by comparison with the figures given in the United States investigation report that this was a decided improvement over the hours of the past years. It was found that the average hours for all occupations in 1908 were 10.4 hours; 1909, 10.1 hours; 1910, 9.9 hours; 1911, 9.8 hours.*

The average length of the canning season was 29.3 working days. This was longer than in any year reported except 1908. In all factories 38% of all the working days were over ten hours; 11% of the days were over twelve hours; 3% over fourteen hours and 1.5% sixteen hours or over. Compare this with the figures given for 1908, 1909, 1910 and 1911,—68.3%, 67.3%, 62.1% and 54.3%, respectively, of days on which hours of work exceeded ten as against 38% in 1913. The improvement is readily noted. Ten plants during the past season had no day over 10 hours.†

Hours per week.

Although it was found to be impracticable to fix a limit of hours of work per week, since the aim was to scatter the long days throughout the season instead of bunching them, 83% of the "women-weeks" were 55 hours or under; 6.5% were from 55 to 60 hours; 5%, 60 to 65 hours; 3%, 65 to 70 hours; 2%, 70 to 75 hours; 1.5% over 75 hours.††

Time of beginning and ending work.

Equal in importance to limiting the number of hours of work per day is defining the closing time, and fixing the length of the "spread of duty." This will encourage and necessitate beginning work as early in the morning as conditions will per-

* U. S. Dept. of Labor, Bulletin No. 119.
† See Table No. 2.
†† Ibid.