The cylinder teeth were made from \( \frac{3}{4} \) inch lag screws \( 2\frac{1}{2} \) inches long. Holes \( \frac{3}{16} \) inch in diameter and \( 1 \) inch deep were bored in the cylinder. A small quantity of powdered resin to help hold the screws was poured into each hole. After the screws were in place the heads were cut off with bolt cutters, leaving teeth about \( 1 \) inch in length. The teeth were placed \( 2 \) inches apart in rows lengthwise of the cylinder and the rows were \( \frac{1}{2} \) inch apart. The teeth, in alternate rows, were offset \( 1 \) inch to center them in the spaces between the teeth in adjacent rows. There were \( 24 \) rows of teeth, with \( 5 \) teeth to the row.

The shaft ran in bearings bolted on the frame work of the thresher. The inside width of the thresher, \( 12 \) inches, allows a \( 1 \)-inch clearance at each end of the \( 10 \)-inch length cylinder to avoid clogging.

The concave was made of a \( 2 \times 8 \) inch piece of oak on which a concave surface was chiseled. The concave was placed about \( 1\frac{3}{4} \) inches from the cylinder so that the ends of the two sets of teeth overlapped about \( 3/8 \) inch and was closely fitted and securely fastened to the sides of the thresher to prevent the lodging of grain. The spacing and arrangement of the \( 45 \) concave teeth was the same as those on the cylinder.

The thresher is mounted crosswise on a base \( 14\frac{1}{4} \) inches high, \( 33 \) inches long, and \( 21 \) inches wide. An electric motor is mounted on the base at the side of the thresher. The entire unit, weighing \( 130 \) pounds, can be moved without disturbing the belt adjustment. The thresher can be operated by a \( \frac{1}{4} \) to \( \frac{1}{2} \) horse-power motor, at a speed of about \( 1,000 \) R.P.M.

In threshing, the sorghum head is fed into the cylinder gradually and then withdrawn. The grain and chaff fall into the drawer, are screened through \( \frac{1}{4} \) inch hardware cloth to remove the larger particles, and then poured in front of an electric fan to blow out the chaff. Recleaning seldom is necessary.

For convenient handling of the sorghum heads the stems should be at least \( 8 \) inches long.—R. O. Snelling, Assistant Agronomist, Division of Cereal Crops and Diseases, Bureau of Plant Industry, U. S. Dept. of Agriculture, Lawton, Okla.

**CYTOLOGY OF CEREALS**

The attention of agronomists, and especially plant breeders, is called to a review of literature pertaining to the cytology of the cereals, including wheat, rye, barley, and oats, made by Hannah C. Aase in *Botanical Review, 1*: 467–496, 1935.

A comprehensive review is made of 125 articles most of which have been published since the author’s original paper (Research Studies, State Coll. Wash., 2:3–60, 1930). A general summary table of chromosome conjugations in \( F_1 \) of cereal hybrids is given based on more than 300 crosses, involving more than 150 different species combinations.

Phylogenetic relationships are suggested in a diagram showing allopolyploidy in wheat.—A. M. Schlehuber, *State College of Washington, Pullman, Wash.*