

Laced Belt Joints.—When making a laced joint, cut the ends of perfectly square and punch the holes exactly opposite one another in the In each end there should be two rows of staggered holes. The number of holes for various widths is given in the table, "Belt Laces for Laced Joints." Begin to lace in the center of the belt and be careful the belt ends exactly in line and to lace both sides with equal tension. It should not be crossed on that side of the belt which runs next to the pulley.

Belt Laces and Holes for Laced Joints

Width of Belt, Inches	Width of Lace, Inches	No. of Holes	Distance of Holes from End		Width of Belt, Inches	Width of Lace, Inches	No. of Holes	Width of Belt, Inches
			First Row, Inches	Second Row, Inches				
1	1-3/4	2 or 3	3/8	...	6	3/8	9	1 1/4
2	2-3/8	3	3/8	3/4	8	1/2	11	1 1/2
2 1/2	3-1/4	5	1/2	1	10	3/4	13	1 3/4
3 1/2	4-1/2	5	3/8	1 1/4	12	1/2	15	2
5		7	3/8	1 3/4	14	1/2	17	2 1/4

Belt Dressings.—Belts should be cleaned and greased every five or ten days to give the grain side a soft adherent surface. The following mixture is recommended: Take two parts of best tallow to one part of cod liver oil (by weight) melt the tallow and allow it to cool until the finger can be inserted without then add the cod liver oil and stir until cooled. A light coat of this mixture should be applied to the driving side of the belt after it has been cleaned. Resin mixtures should never be used to prevent belts from slipping. They will cause temporary adhesion, but the belt soon becomes glazed and slips more than before. If a belt has become saturated with oil, scrape it and pack it in dry sawdust or other absorbent material for three or four days. When belting becomes necessary, use a wooden or metal scraper. A dressing recommended for rubber belts consists of equal parts of red lead, black lead, French yellow and linseed oil with boiled linseed oil and enough japan to make it dry quickly. Antiseptic grease should never be used on rubber belts.

Thickness and Width of Belts.—Narrow, thick belts are more difficult to work more satisfactorily than wide and thin belts. According to the recommendations of Mr. Fred W. Taylor, it is advisable to use double belts on pulleys 12 inches in diameter or larger; triple belts on pulleys 20 inches in diameter or larger; quadruple belts on pulleys 30 inches in diameter or larger. If thin belts are used at high speed, they tend to run in waves on the slack side and travel in a wavy line especially if there are sudden load changes. This waving and snapping to and fro of the belt rapidly and can be practically eliminated by having the thickness in proportion to the width. The speed at which belting runs has comparatively little effect upon its life until the velocity is higher than 2500 to 3000 feet per minute. The life is affected principally by the power transmitted, the method of fastening the ends, and the care of the belting.

