

Rope, *n.* [A. S. *rap*; Du. *reep*; Irish *rap*; Icel. *reip*; Ger. *reif*.] A large, stout, twisted cord of hemp, of not less, generally, than an inch in circumference. A certain proportion of hemp twisted together forms a *yarn*, and a number of yarns form a *strand*. Three strands twisted together form a *rope*. Rope is either *white* or *tarred*, the latter being the best if liable to exposure to wet, the former if not exposed. The strength of tarred rope is, however, only about three-fourths that of white rope, and its loss of strength increases with time. Rope is designated by its circumference, expressed in inches, and is issued in *coils* of 113 fathoms each; *marline* and *hambroline* in *skeins*, spun-yarn in *pounds*; the latter is made from old rope (junk). Government rope is distinguished by a colored thread,—red, blue, or yellow,—which runs through it. Rope used in the artillery service is coiled *with the sun*, *i. e.*, from left to right, in which direction the yarns are twisted so as to avoid *kinking*. The strength of white heinpen rope may be approximately calculated by the following rule, *viz.*: square the circumference, and divide by five for the number of tons *dead-weight* that the rope will bear. The strain, however, caused by a sharp jerk upon a rope is very much greater than that of a *dead-weight*. It is stated, in this respect, that the strain upon a rope loaded with a weight of 200 pounds, and suddenly checked after a fall of 8 feet, is nearly equal to that which is caused by a *dead-weight* of 2 tons. — Other materials beside hemp are used in the manufacture of rope, but to a smaller extent.—*Coir-rope*, which comes from Ceylon and the Maldivé Islands, is made from the fibrous husk of the cocoa-nut; *Manila-rope* from the fibres of a species of wild banana. *Wire-rope* both iron and steel, is also employed; on ship-board, particularly, to a considerable extent. — See CABLE, and CORDAGE.