Revolving Derrick Drawbridge

Equipment
1 x 5m (15ft) spar
2 x 3m (10ft) spars
2 x 1m (3ft) spars
8 x 0.6m (2ft) spars
1 x 10m (30ft) rope 15mm diameter
1 x 5m (15ft) rope 15mm diameter
5 x 10m (30ft) rope 10mm diameter
5 x 5m (10ft) lashing lengths
1 x 7m (20ft) 10mm diameter ropes
20 light lines
1 single pulley
4 large pegs
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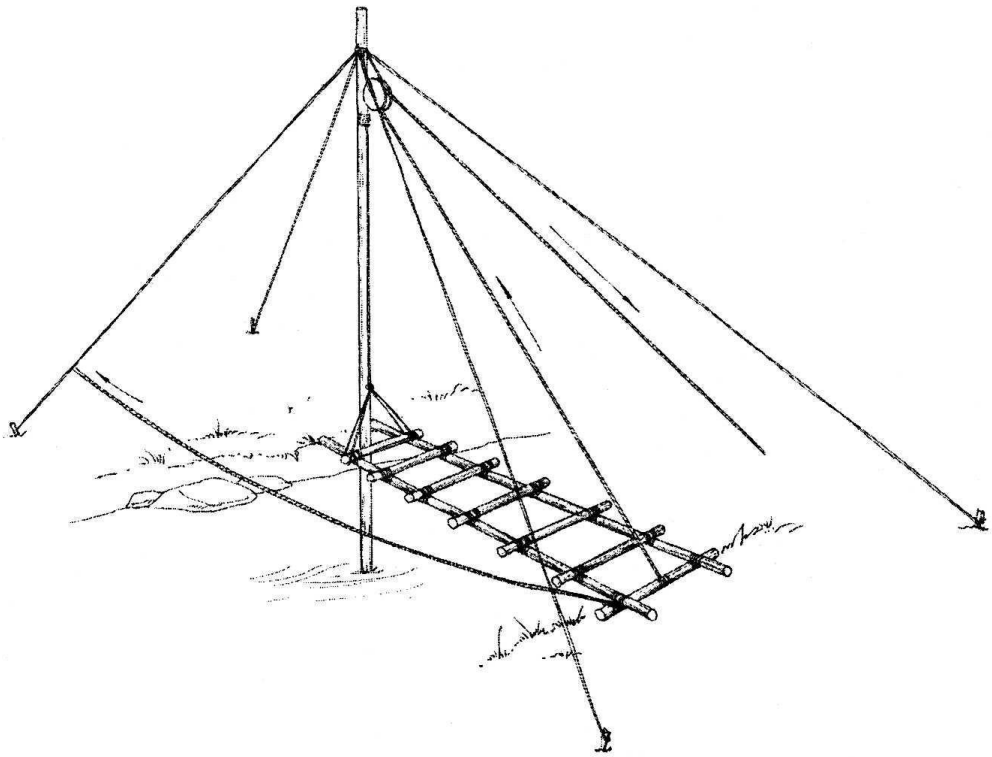
Method

- Construct a ladder using 2 x 3m (10ft), 8 x 0.6m (2ft) and 2 x 1m (3ft) spars and the light lines. The 1m (3ft) spars should be at either end of the ladder with the 0.6m (2ft) spars equally spaced between them.
- Tie one end of each of the 4 x 10m (30ft) 10mm diameter ropes to the top of the 5m (15ft) spar (guy ropes).
- Attach the single pulley to the 5m (15ft) spar just below the guys.
- Feed one end of the 10m (30ft) 15mm diameter rope through the pulley and then temporarily knot the ends together to prevent it pulling through whilst the spar is being raised.
- Place the butt end of the 5m (15ft) spar in the middle of the river and peg it out as for the Haymaker bridge.
- Place the ladder in position with one end resting on the bank and the other against the vertical spar.
- Using a ladder sling, loop the centre of the 7m (20ft) rope over the end of the ladder above the river and tie off the loose ends round the vertical spar.
- One end of the 10m (30ft) 10mm diameter rope is tied to one side of the ladder at the bank end and the loose end passed to a Scout on the opposite bank.
- Finally, tie one end of the rope that is threaded ('reaved') through the pulley to the centre of the ladder rung furthest from the vertical spar. The other end is held by a Scout standing on the bank by the ladder.

Use
One person walks across the ladder and holds on to the vertical pole.
The Scout holding the rope through the pulley uses it to raise the ladder from the bank.
The Scout on the other bank pulls on his or her rope so that the ladder **gently** pivots around the vertical spar until it reaches the bank.
The Scout in charge of the pulley rope then lowers the ladder onto the opposite bank so that the person in the middle can walk across.



Note: Since the design of the project the principles of Health and Safety have changed dramatically.
Caution should be exercised to assess the risks associated with this build and especially regarding possible falls from height, so handrails or belays and harnesses may be required.