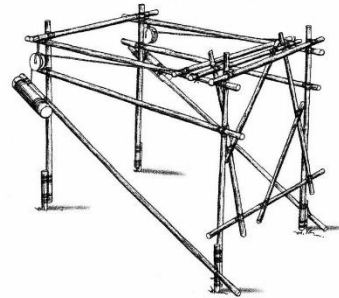


# Up and Over Gateway

## Equipment

- 8 x 2.5m (8ft) spars
- 5 x 1.8m (6ft) spars (frame)
- 4 x 1.8m (6ft) spars (gate)
- 3 x 1.2m (4ft) spars
- 2 x 0.6m (2ft)
- 2 x 3.0m (10ft) spars
- 1 maul or sledge hammer
- 2 x single pulleys
- 36 lashing lengths
- 2 x 1.2m long ropes
- 2 x 4.0m long ropes to fit pulley
- 4 pickets



## Method

It is probably easier to build this project lying on its side as it would be difficult to reach some of the top lashings if you build it standing up.

### Frame:

Prepare two identical frames using 4 x 2.5m spars (see diagram 1)

Lay one frame down so that the legs A and B are on top of the crossbars.

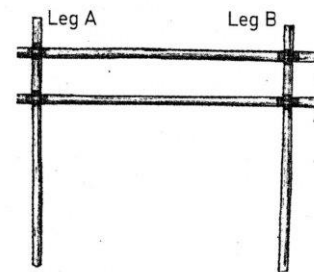


Diagram 1

Lash 5 x 1.8m (6ft) spars vertically - one on the inside of each end of leg A; one on the outside of either end of leg B and one on top of the top crossbar about 0.5m from leg B.

The second frame is now lashed to these verticals with the crossbars on top of the legs (ie both crossbars go on the outside of the frame when it is standing upright). It may be helpful to prepare 4 pairs of sheer legs to support the upper frame whilst the lashings are being completed.

Attach a single pulley at each end of the vertical spar which joins the tops of legs A and thread the 4m long ropes through the pulleys.

Stand the frame upright. Remove the 2 x 1.8m spars which joined the butt ends of the legs - these were only required to keep the frame in shape whilst it was lifted into position. Once you are sure the frame is square and in the right place, place the four pickets next to the legs and knock them into the ground. Lash the legs to them.

Next, start on the gate. Place 2 x 1.8m (6ft) spars approx 1m apart and lash a third 1.8m spar across one end.

Turn the gate over and lash the 4th 1.8m spar across the other end to form a rectangle.

Cross brace as shown in the diagram 2.

The gate is then put into position on the frame, such that the cross bracing and bottom horizontal spar are facing away from the frame. The top bar of the gate sits on the top horizontal side bars of the frame, just behind the uprights (B).

Tie one end of the ropes which are through the pulleys to the top of the gate.

Prepare two counterweights by lashing the remaining two short spars to one end of each of the 3m spars. Tie the other end of the ropes which go through the pulleys to the counterweights and loosely tie the opposite ends of the 3m spars to the base of the frame by the gate.

To operate the gate, lift it slightly and let the counterweights help to pull it horizontal.

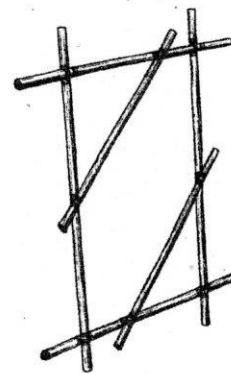


Diagram 2

