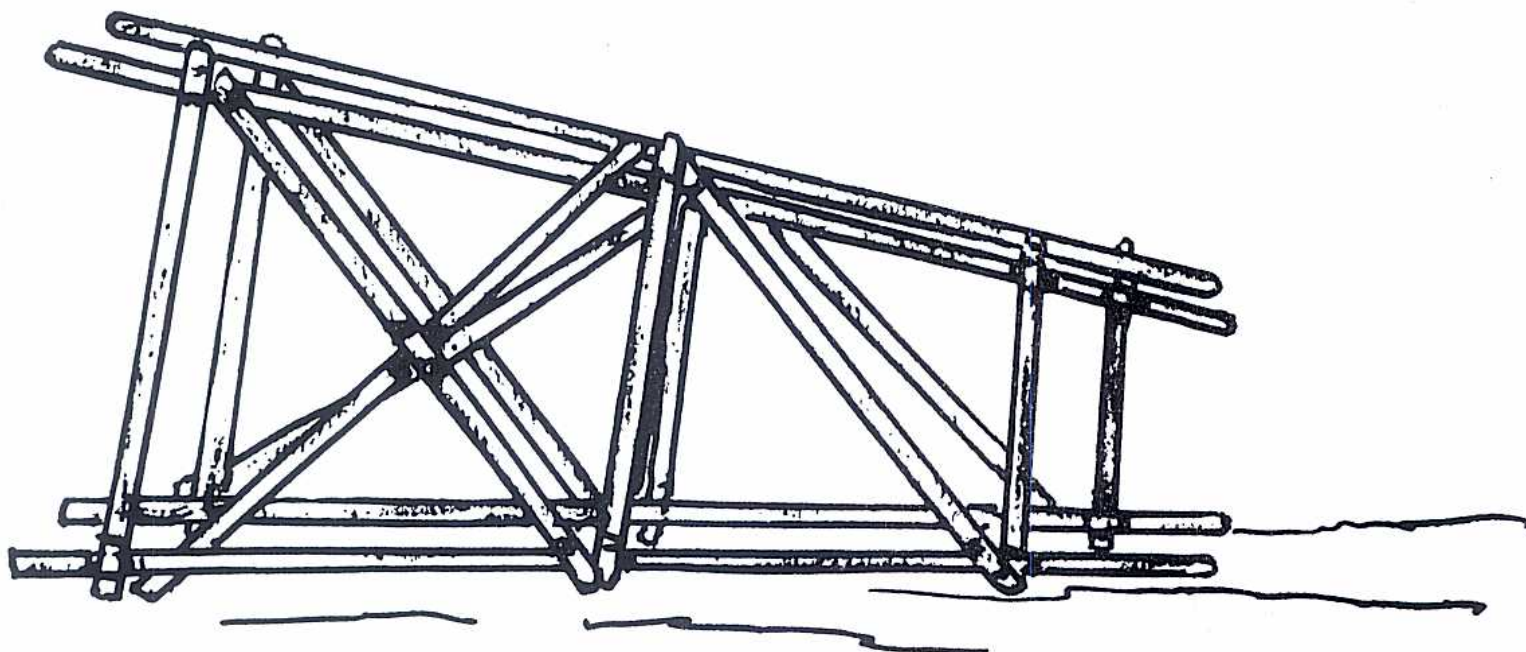
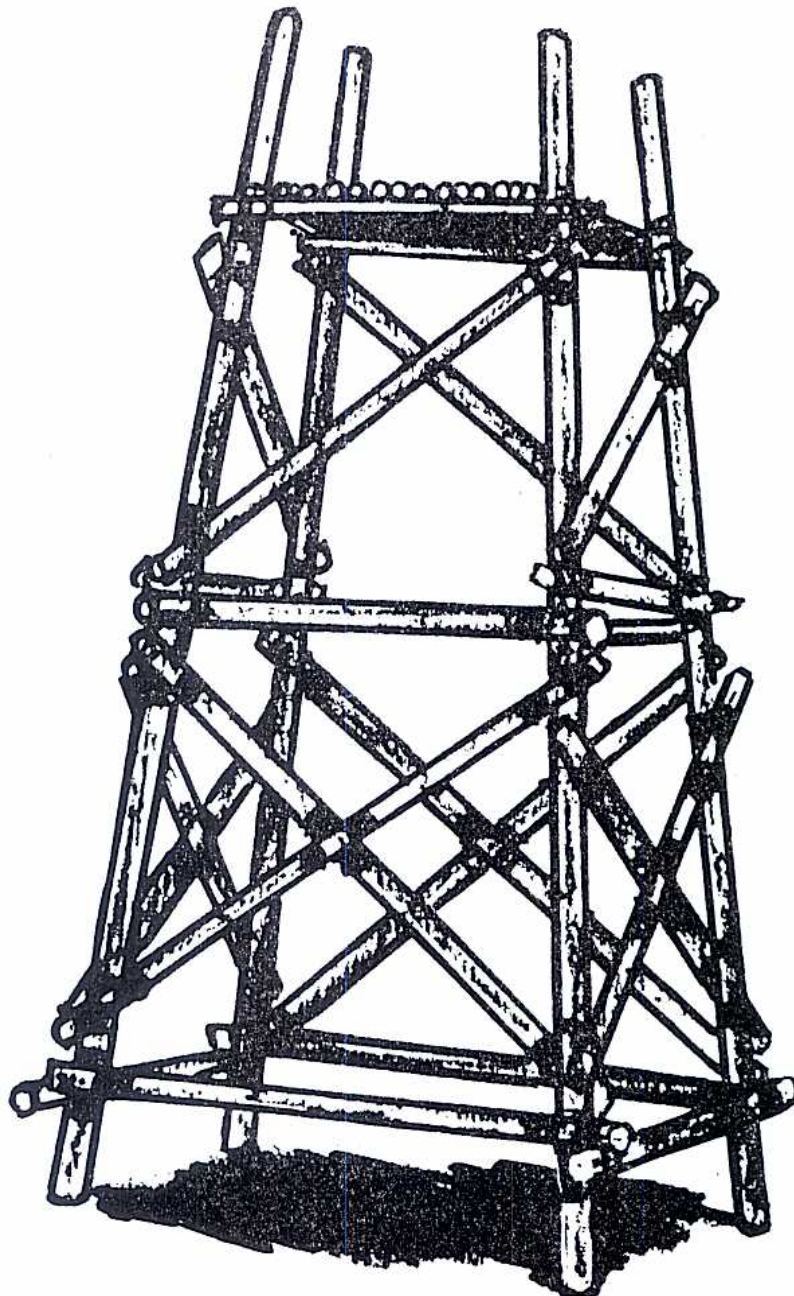
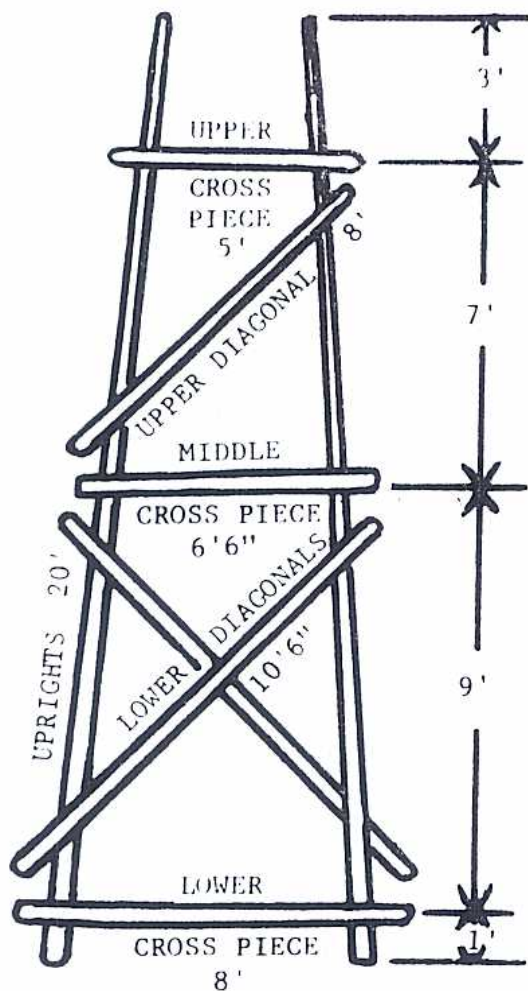


TOWER CONVENTIONAL



Materials for Pioneering Projects

Signal Tower, Conventional

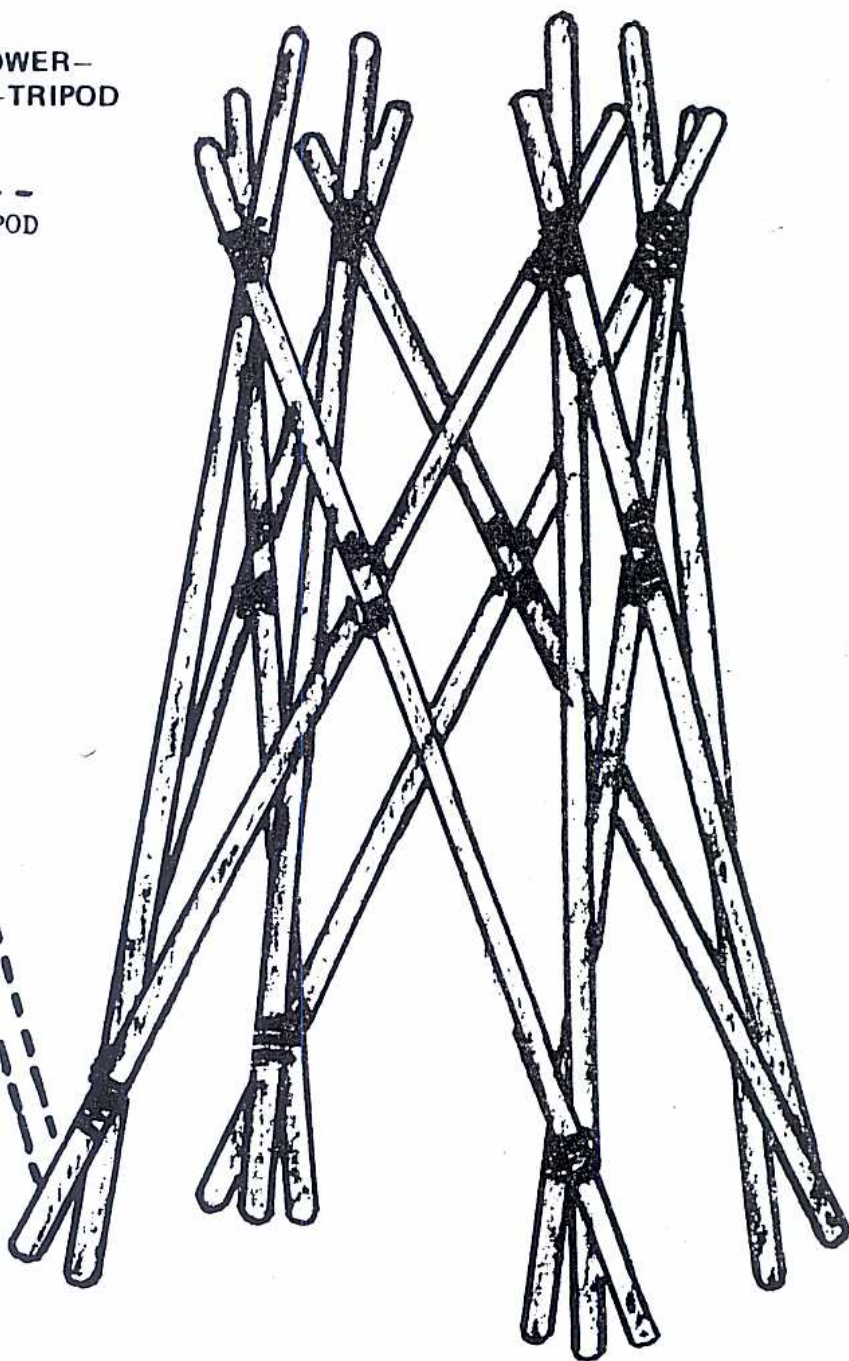
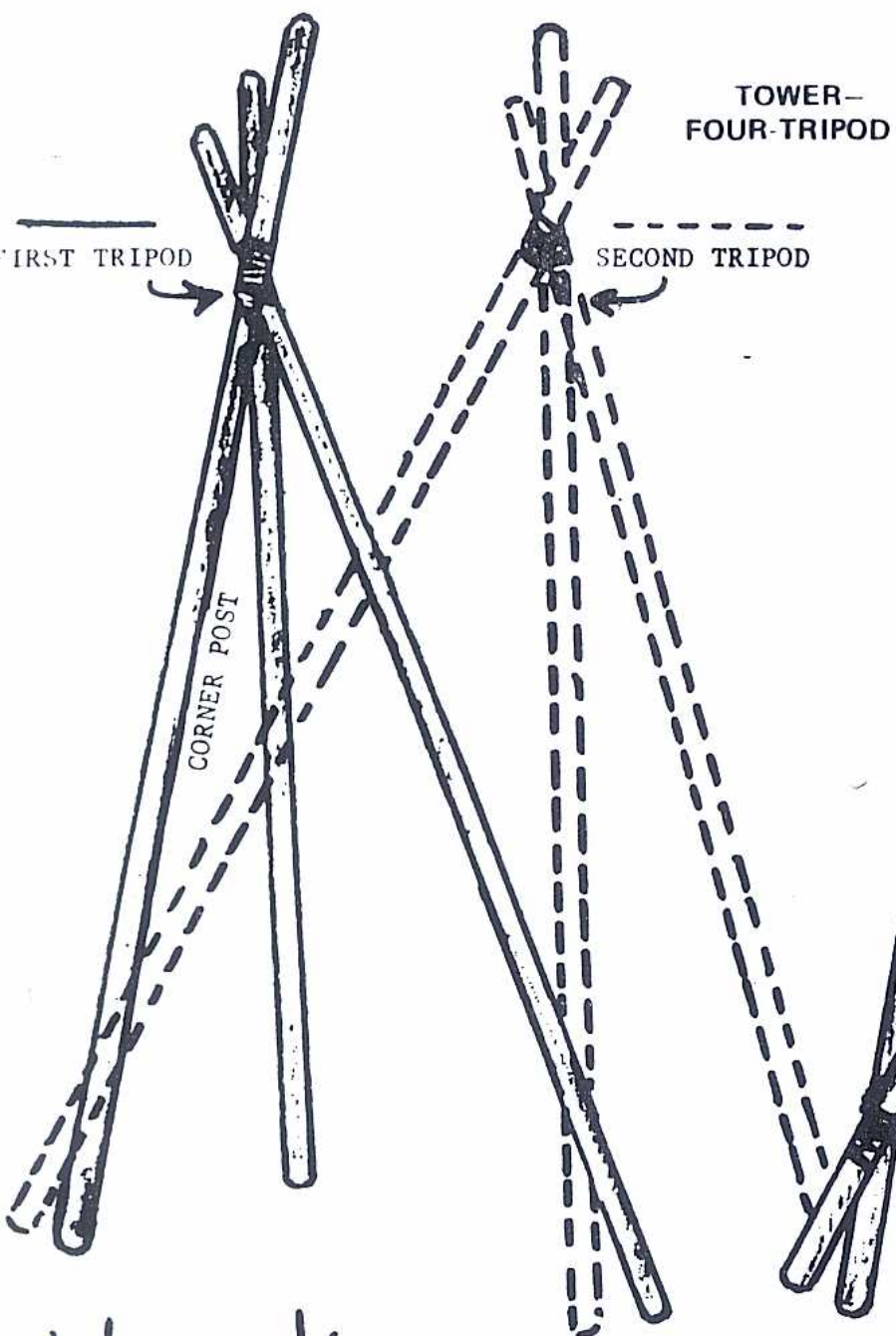
Reference: Boys' Life Reprint Pioneering, No. 26-044
Fieldbook pages 110-111

POLES

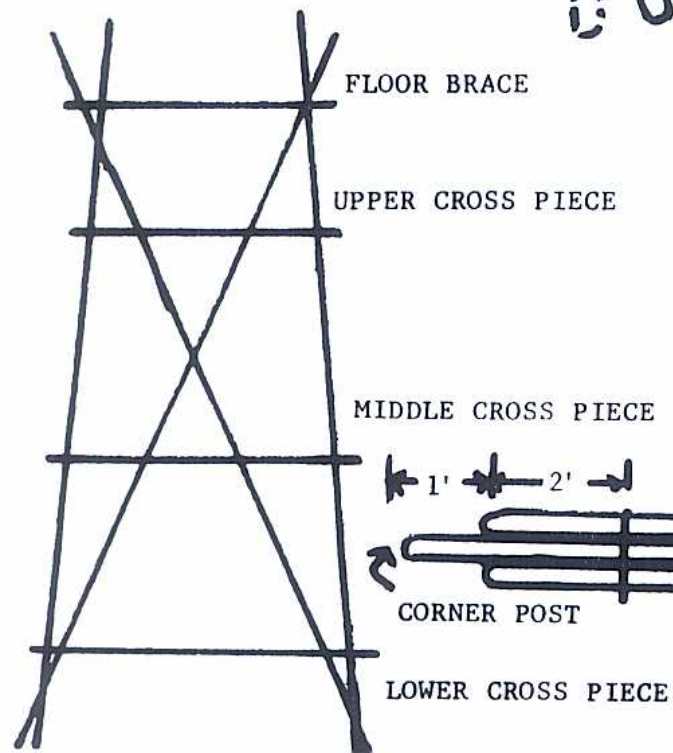
No.	Diam. at butt	Length	Purpose
4	4"	20'	Uprights
4	4"	8'	Lower crosspieces
8	4"	10' 6"	Lower diagonals
4	3"	8'	Upper diagonals
4	3"	6' 6"	Middle crosspieces
4	3"	5'	Upper crosspieces
12	3"	5'	Platform

ROPE

54	$\frac{1}{2}$ " diam.	18'	Lashings
Whipping twine			



ALL FOUR TRIPODS IN PLACE AND LASHED



1' 2'

DIAGONAL

CORNER POST

LOWER CROSS PIECE

Materials for Pioneering Projects

Four-Tripod Tower

Reference For tripod lashings, see Fieldbook page 102

POLES

No.	Butt Diam.	Length	Purpose
12	4"	20'	Corner posts and diagonals
4	4"	9'	Lower cross pieces
2	3"	8'	Middle cross pieces
2	3"	6'	Upper cross pieces
2	3"	5'	Floor braces
10	3"	5'	Floor boards

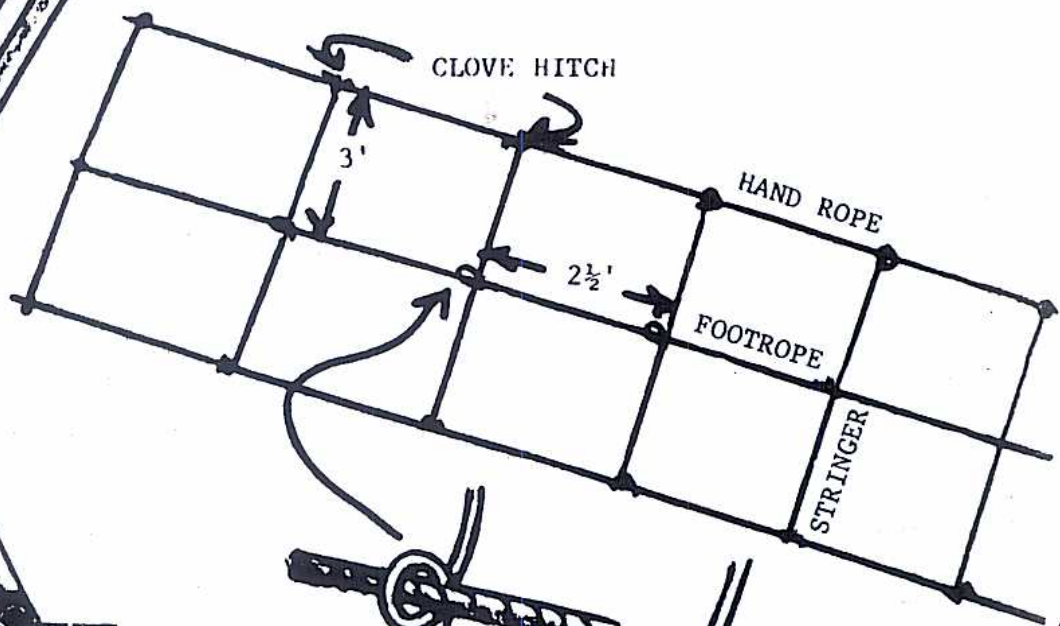
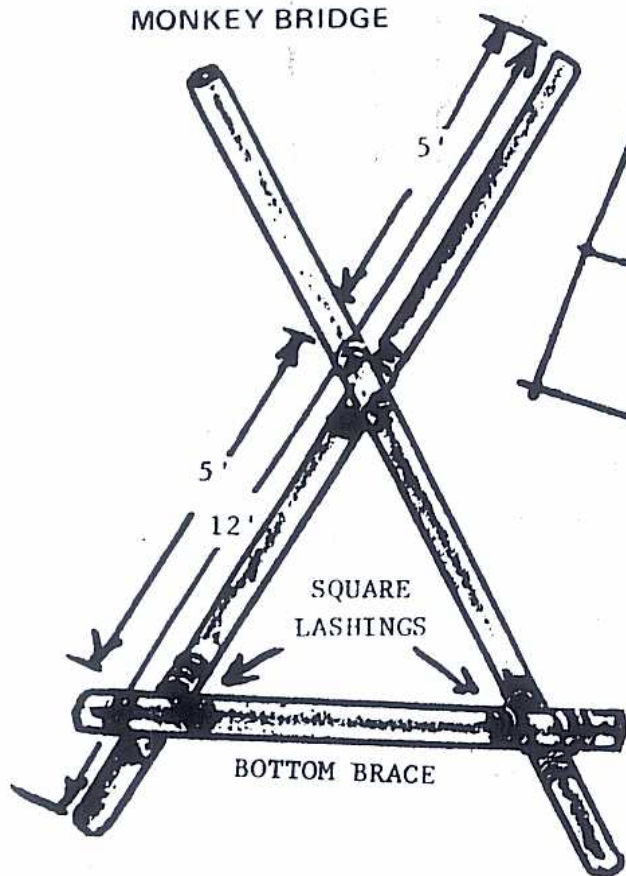
ROPES

4	1/4"	36'	Tripod lashings
8	1/4"	24'	Lashings of diagonals and lower cross pieces
12	1/4"	18'	Lashings of upper, middle cross pieces and floor braces

Binder twine

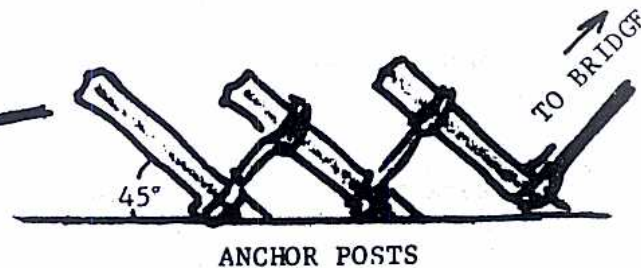
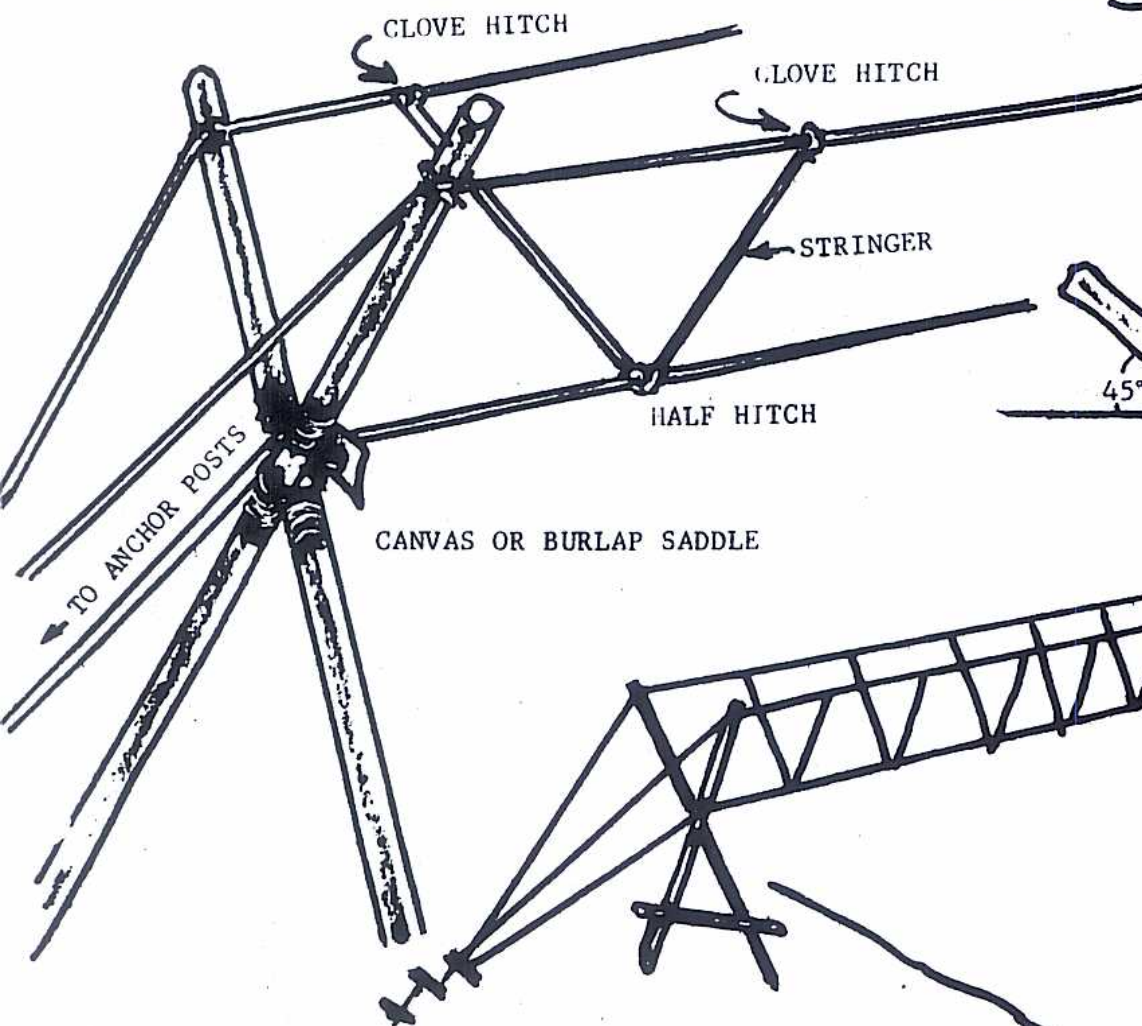
For floor board lashings

MONKEY BRIDGE



USE THIS
HALF HITCH

NOT THIS



ANCHOR POSTS

Materials for Pioneering Projects

Monkey Bridge

Reference: Boy's Life Reprint Pioneering, No. 26-044
Fieldbook pages 108-109

POLES

No.	Butt Diam.	Length	Purpose
4	4"	12'	Shear legs
2	3"	5'	Bottom braces
6	3"	4'	Stakes

ROPE

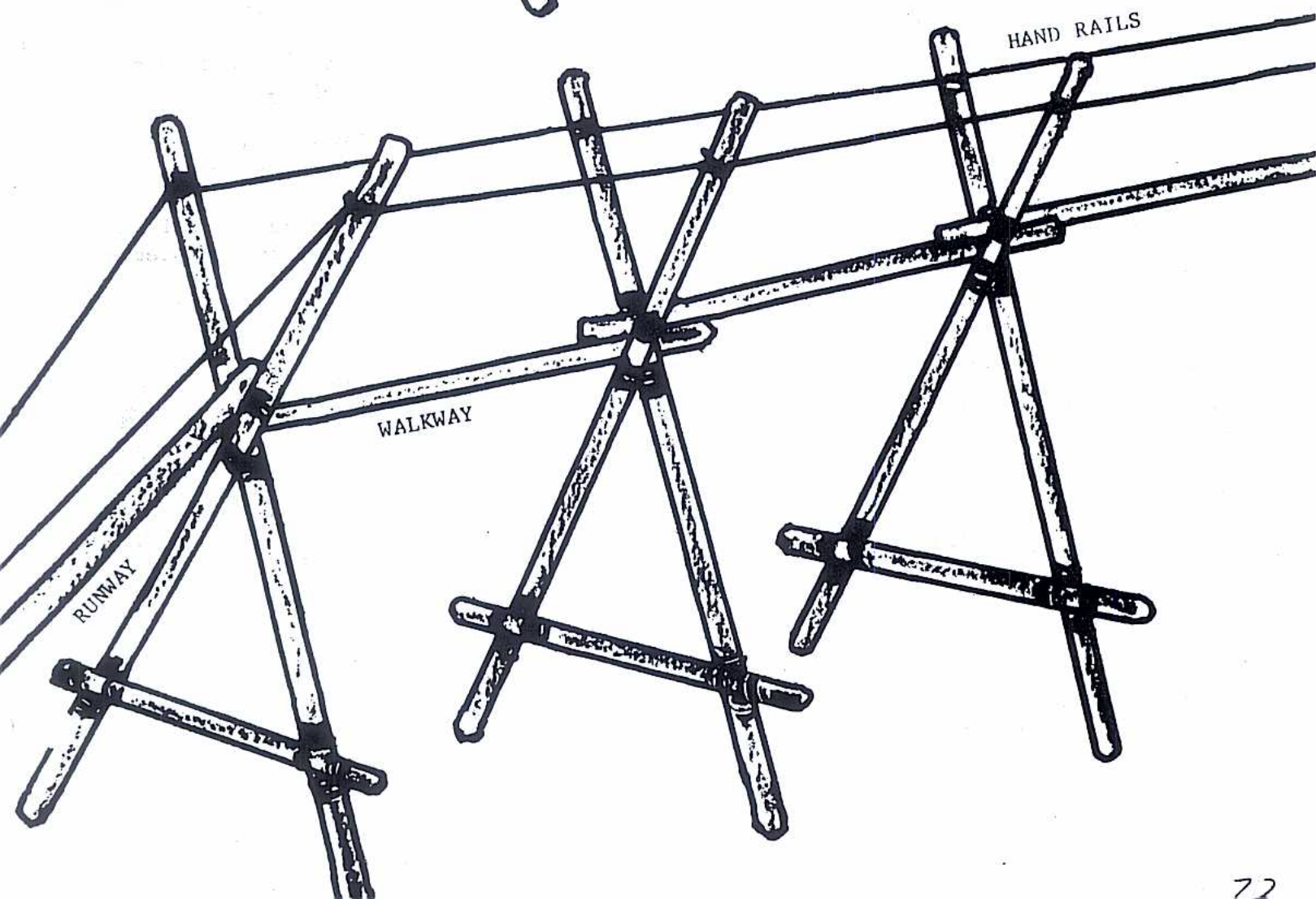
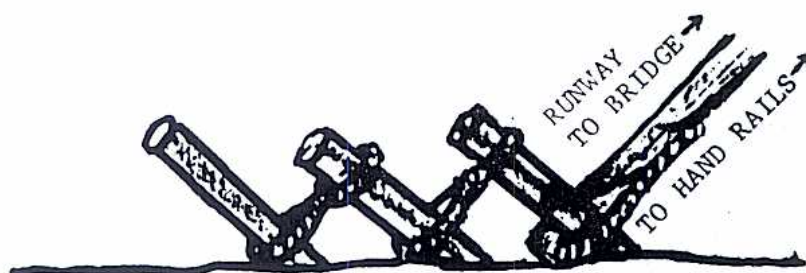
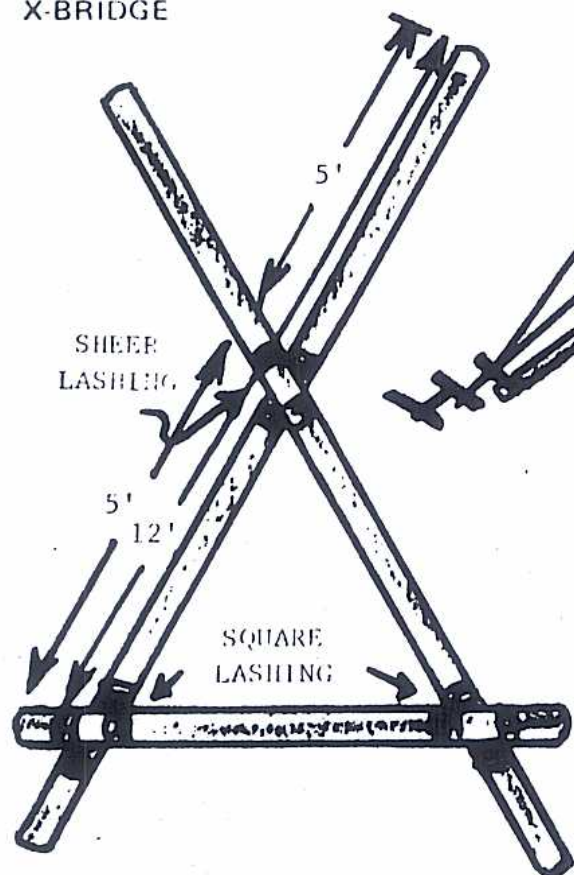
No.	Diameter	Length	Purpose
1	1"	60'	Foot rope
2	1/2"	60'	Hand ropes
6	1/4"	18'	Lashings
10	1/4"	9'	Stringers
6	1/4"	13'	Anchorage

OTHER EQUIPMENT

2 burlap bags for padding, in crotch of shear legs
whipping twine

These ropes make a bridge 30' between shear legs. If longer is desired, increase length of foot rope and hand ropes, and add one stringer for every 3' increase in span.

X-BRIDGE



Materials for Pioneering Projects

X-Bridge

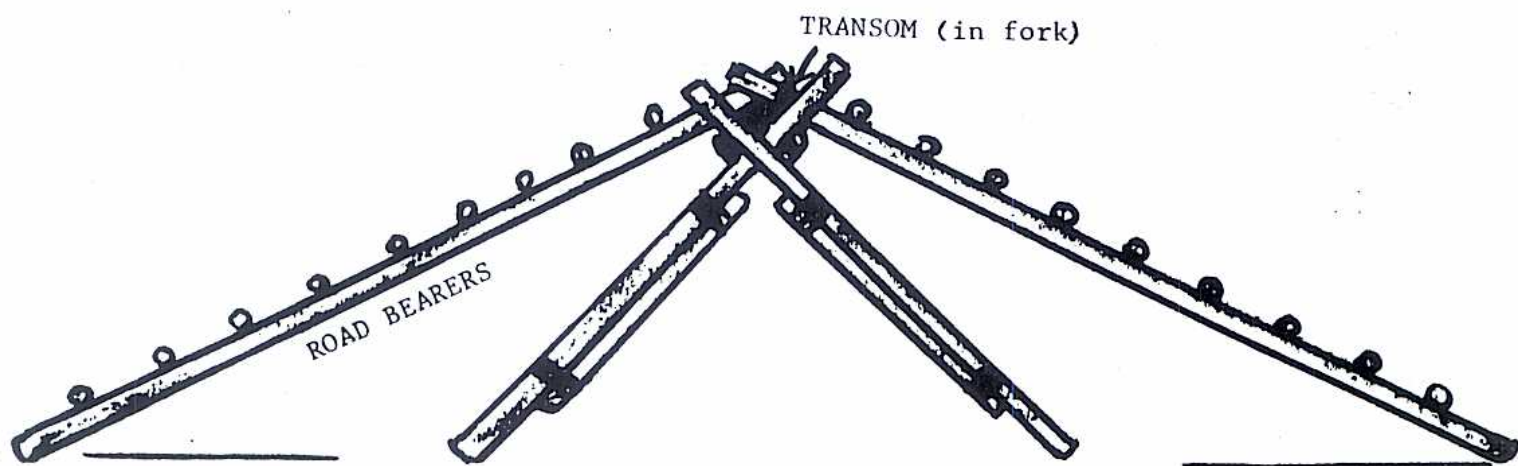
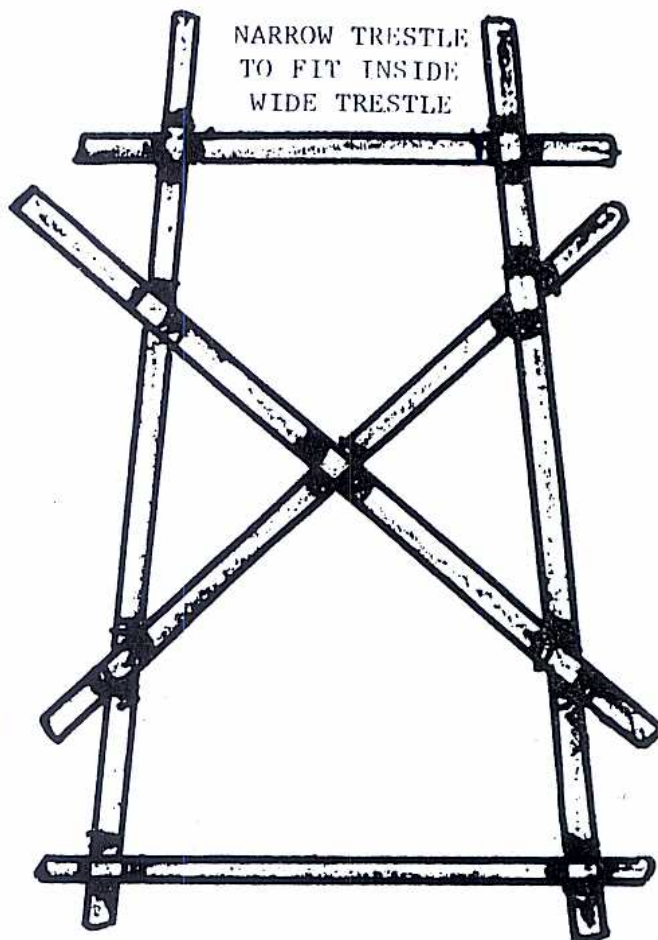
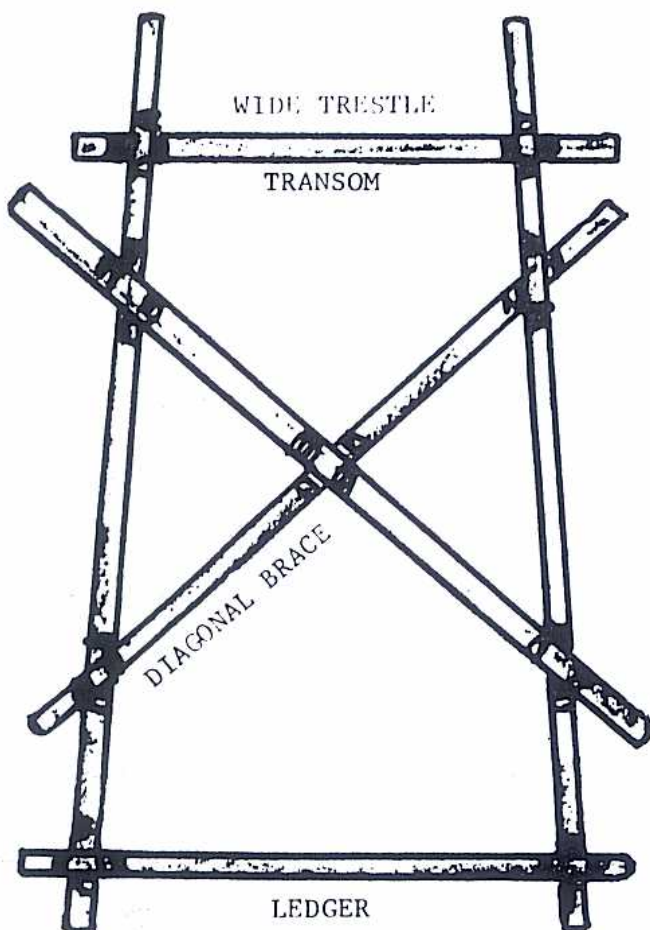
POLES

No.	Butt Diam.	Length	Purpose
10	4"	12'	"X" pieces
5	3"	5'	Bottom braces
4	3"	10'	Walkways
2	4"	12'	Runways
8	2"	3'	Stakes

ROPE

No.	Diameter	Length	Purpose
2	1/4"	80'	Hand rails
5	1/4"	18'	Diagonal lashings of "X"s
10	1/4"	18'	Square lashings of bottom braces
10	1/4"	18'	Lashing of walkway and runway pieces

SINGLE-LOCK BRIDGE



Materials for Pioneering Projects

Single-lock Bridge

Reference: Boy's Life Reprint Pioneering, No. 26-044
Fieldbook pages 104-107

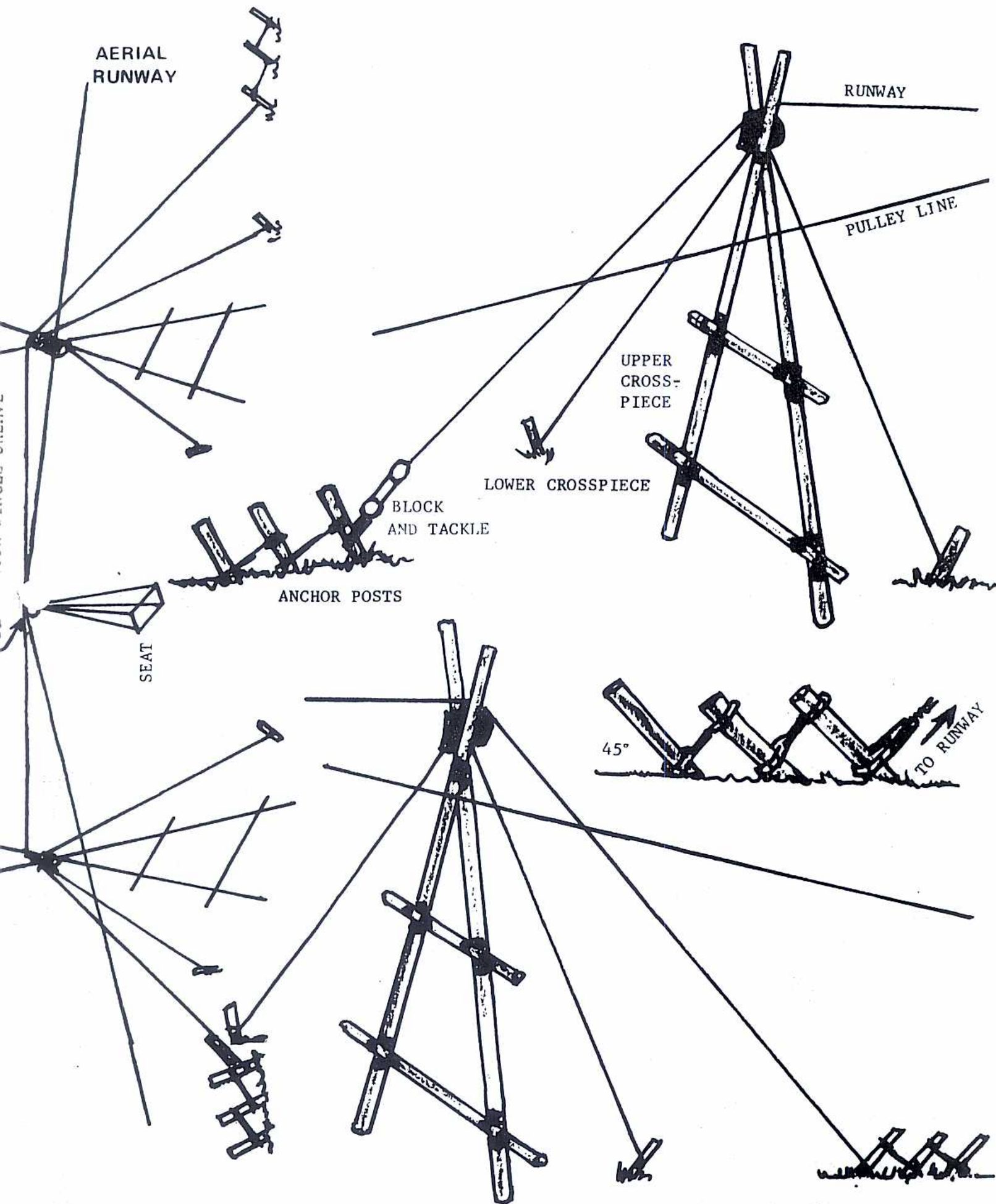
POLES

No.	Butt Diam.	Length	Purpose
4	4"	8'	Legs
2	4"	5'	Ledgers
1	4"	5'	Transoms (fork)
2	3"	5'	Transoms
4	3"	7'	Diagonal braces
120	3"	5'	Flooring
4	2"	15'	Road bearers

ROPE

No.	Diam.	Length	Purpose
22	1/4"	18'	Lashings
4	1/4"	24'	Lashings for road bearers
4	1/4"	120'	Running lashing for flooring

The bridge is about 4 feet high, with a total length of about 28'.



Materials for Pioneering Projects

Aerial Runway

Reference: Boys' Life Reprint Pioneering, No. 26-044

POLES

No.	Butt Diam.	Length	Purpose
4	4"	15'	Uprights
2	3"	6'	Lower crosspiece
2	3"	4½'	Upper crosspiece
6	3"	4'	Anchor posts
4	2"	3'	Guy line posts

ROPE

No.	Diam.	Length	Purpose
1	5/8"	60' (or longer)	Runway rope
1	1/4"	120' (or double length of runway)	Pulley line
4	1/4"	12'	Guy line
4	1/4"	15'	Anchor ropes
10	1/4"	18'	Shear leg lashings
1	1/4"	35'	Rope for seat
1	1/4"	6'	Choke rope for block hook

OTHER EQUIPMENT

2 burlap bags

1 block with a single sheave to fit 5/8" rope

1 block and tackle set, consisting of one block with a single sheave and one with double sheaves

1 board 10" x 24" for seat

string for mousings