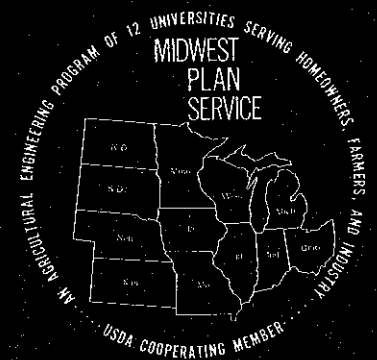


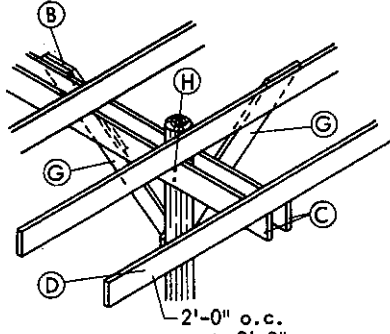
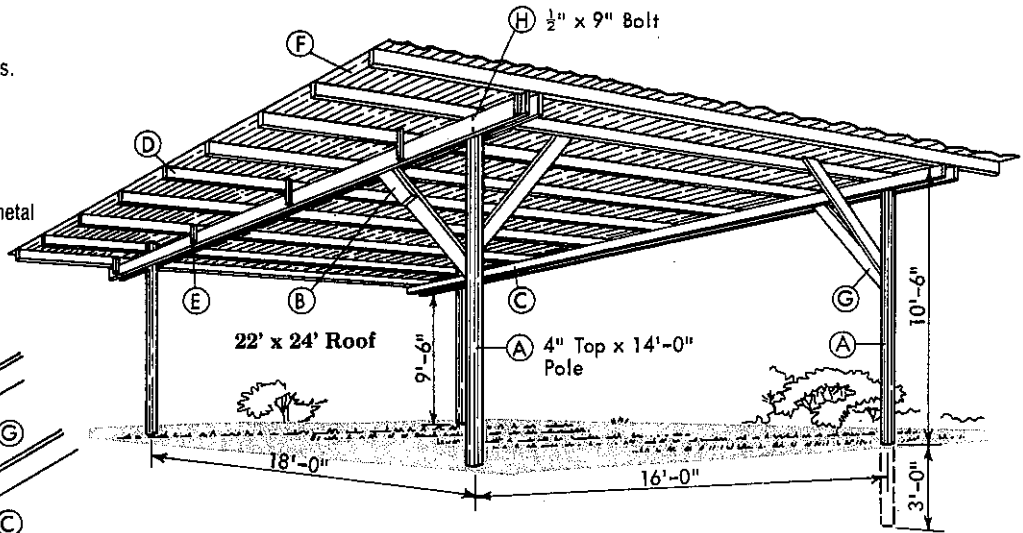
BEEF HOUSING & EQUIPMENT HANDBOOK



SUN SHADE

CUTTING LIST

Item	No.	Description
A	4	4" top x 14'-0" poles, pressure-treated
B	4	2x6 x 24" filler
C	4	2x10 x 22"
D	12	2x6 x 24"
E	12	2x2 x 12"
F	24	12'-0" x 26" corr. metal
G	8	2x6 x 4'-0"
H	8	1/2" x 9" bolts

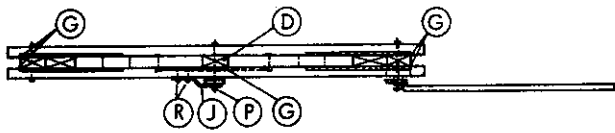


Corner Detail

Space allowances: 20 - 25 sq ft/head. Paint top side of roof white and underside of roof black.

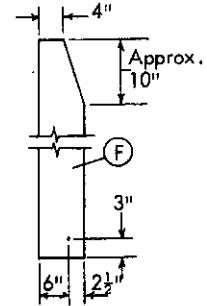
Orient a row of shades north and south so sun will shine under shade early morning and late evening.

WALK-THROUGH HEADGATE

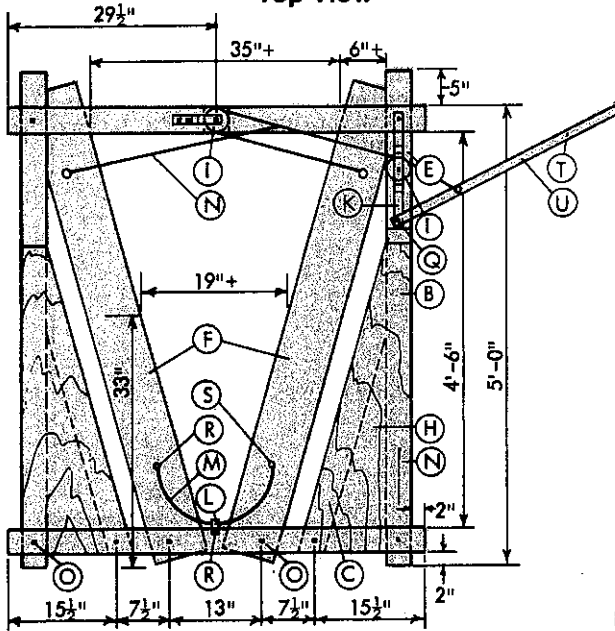


Top View

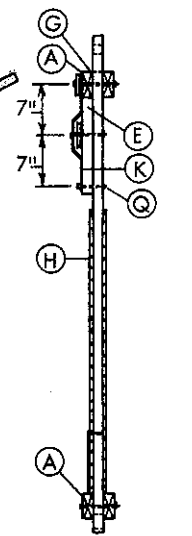
Weld cut washer S to spring tooth M. 3/16" cable may be substituted for chain N. Use pressure-treated lumber for longer lasting headgate. Headgate may be mounted on chute if desired. Length of bolts based on kiln dried lumber.



Neck Board Detail



Front View



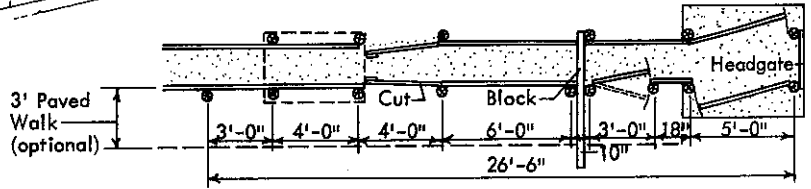
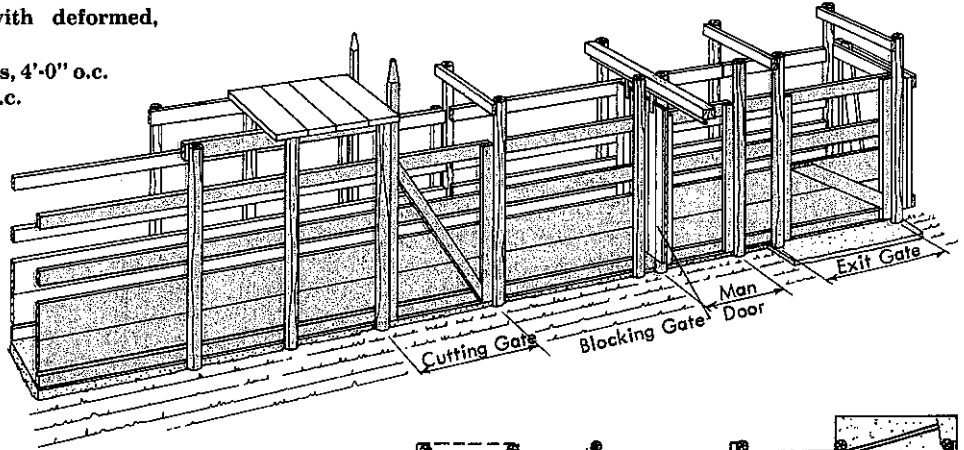
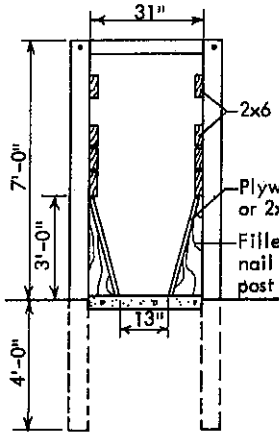
Side View
Handle Not Shown

BILL OF MATERIALS

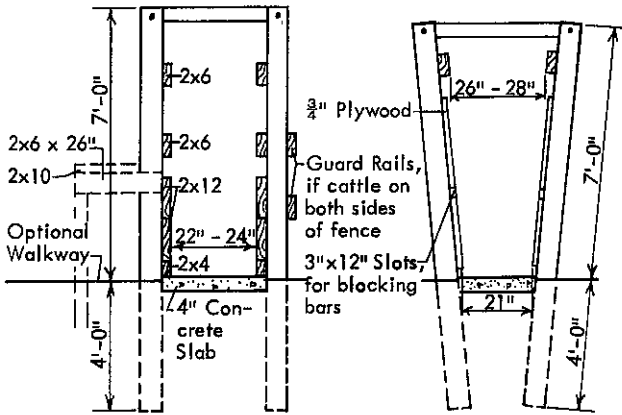
Item	No.	Description
A	4	2x4 x 4'-11" horizontals
B	2	2x4 x 5'-9" uprights
C	2	2x4 x 3'-9" brace
D	1	2x4 x 4" block
E	1	2x4 x 13" block
F	2	2x8 x 5'-7" neck board
G	14	1/8" x 4" x 4" hardboard spacer
H	4	1/2" x 15" x 3'-3" ext. plywood brace
I	2	3" pulleys
J	1	3/16" x 8" strap iron
K	1	3/16" x 17" strap iron
L	1	1/8" x 4" strap iron
M	1	32" spring tooth
N	1	3/16" x 10'-4" chain
O	8	1/4" x 5" machine bolt
P	1	1/4" x 6" machine bolt
Q	1	1/4" x 3 1/2" machine bolt
R	5	1/2" x 2" machine bolt
S	2	1 1/2" cut washer
T	1	Hook
U	1	1 1/2" x 3'-0" pipe

WORKING CHUTES

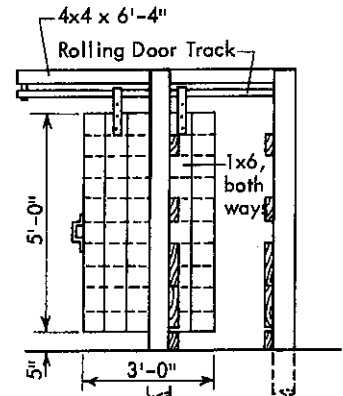
Fasten lumber to posts with deformed, hardened nails.
 1/2" plywood sides with 6" posts, 4'-0" o.c.
 2x6 sides with 6" posts, 6'-0" o.c.



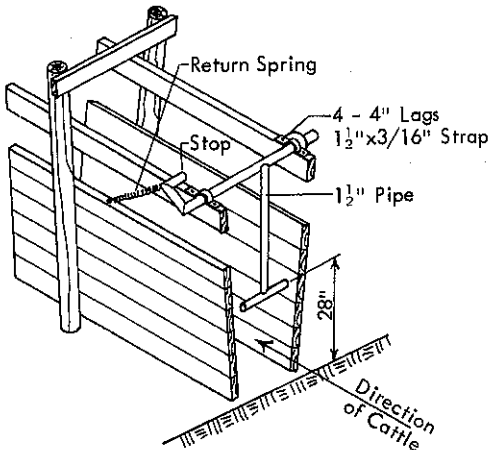
Plan



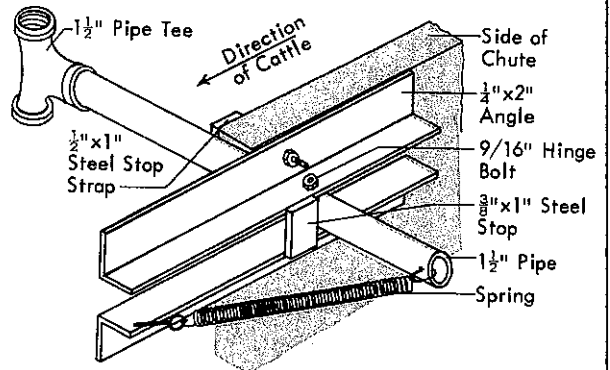
Working Chutes



Blocking Gate

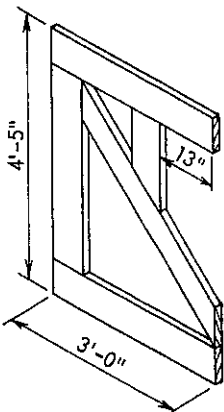
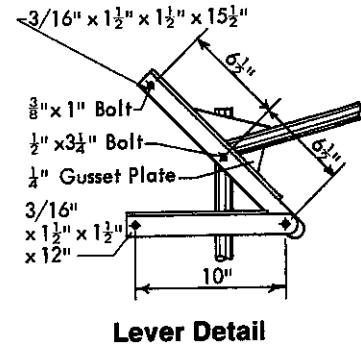
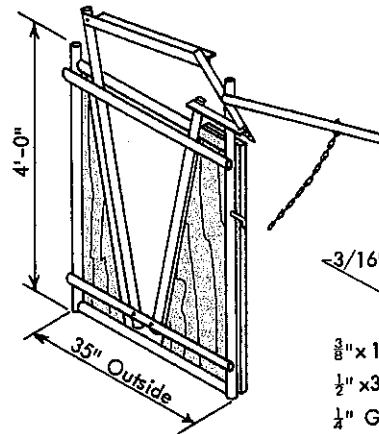
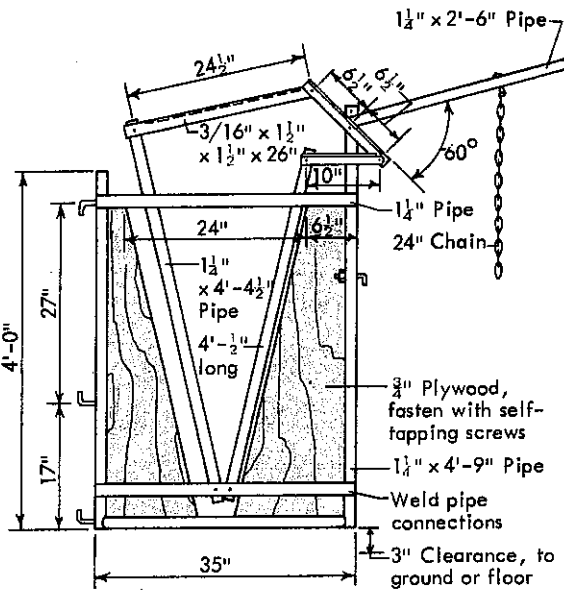


Check Stop To Prevent Back-Up In A Cattle Chute

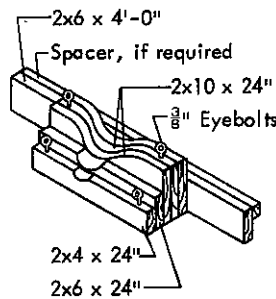


Build on equal but opposite for other side.
Cattle Chute Back-Up Stop
 For Installation On 2 Sides Of A Chute

HEADGATES

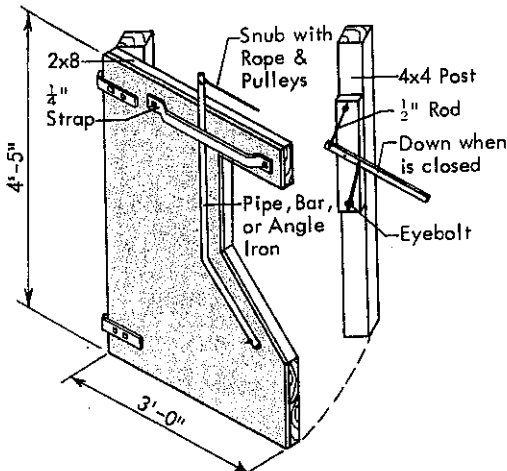
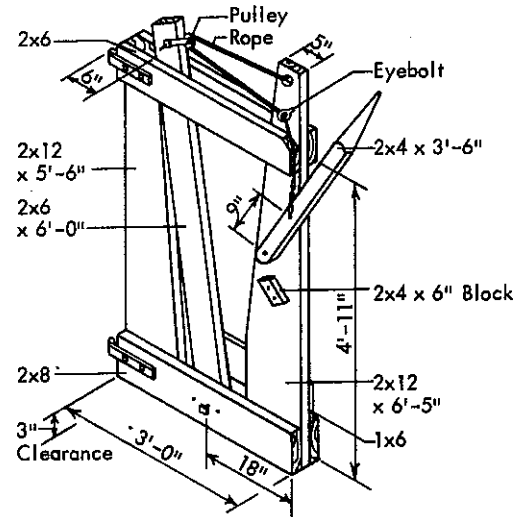


2x8 FRAMING Cover One Side with $3/4$ " Plywood

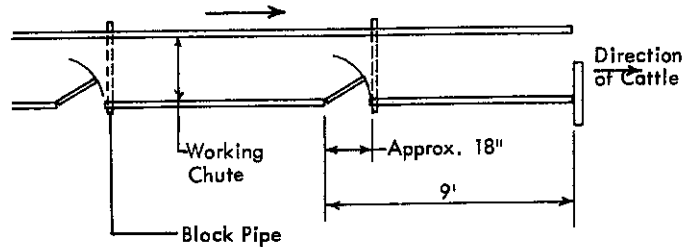


Chin Block

May be bolted at bottom of neck "V" on any headgate.

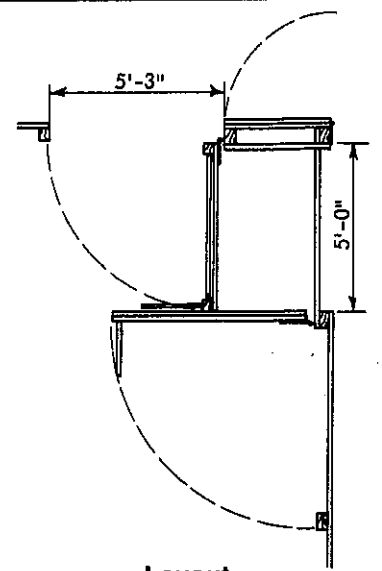
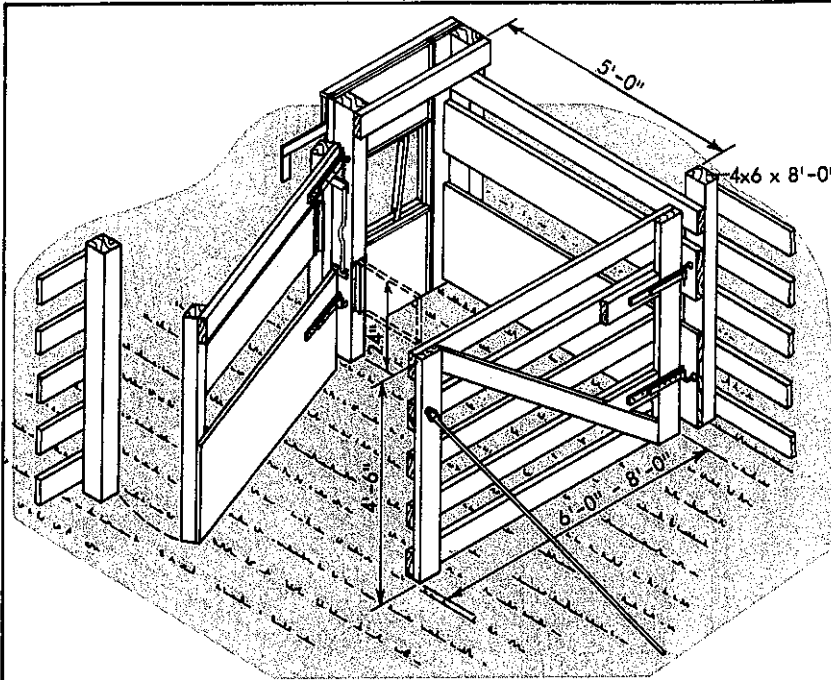


Can open gate away from downed animal.



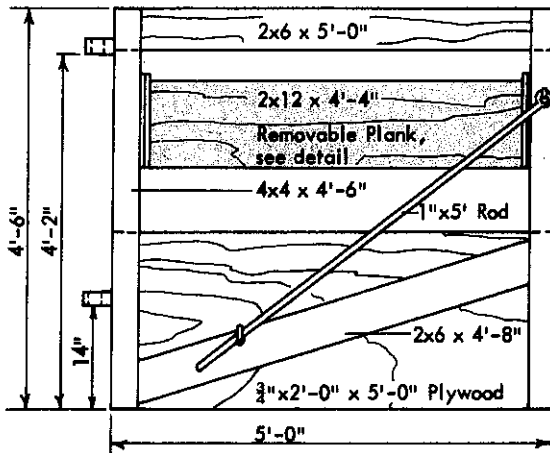
For Walk-through Animal Traffic

CATTLE TREATMENT STALL

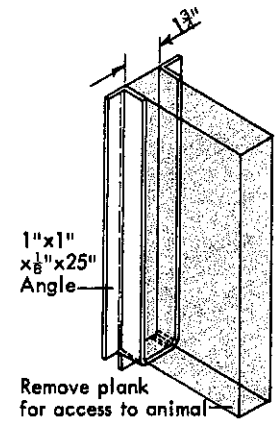


Layout

Suitable for lot or corner hospital pen.
For calving, use snub instead of headgate.



Gate Detail



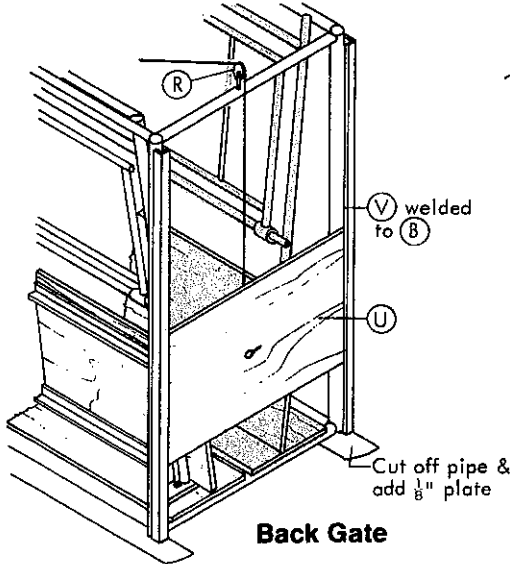
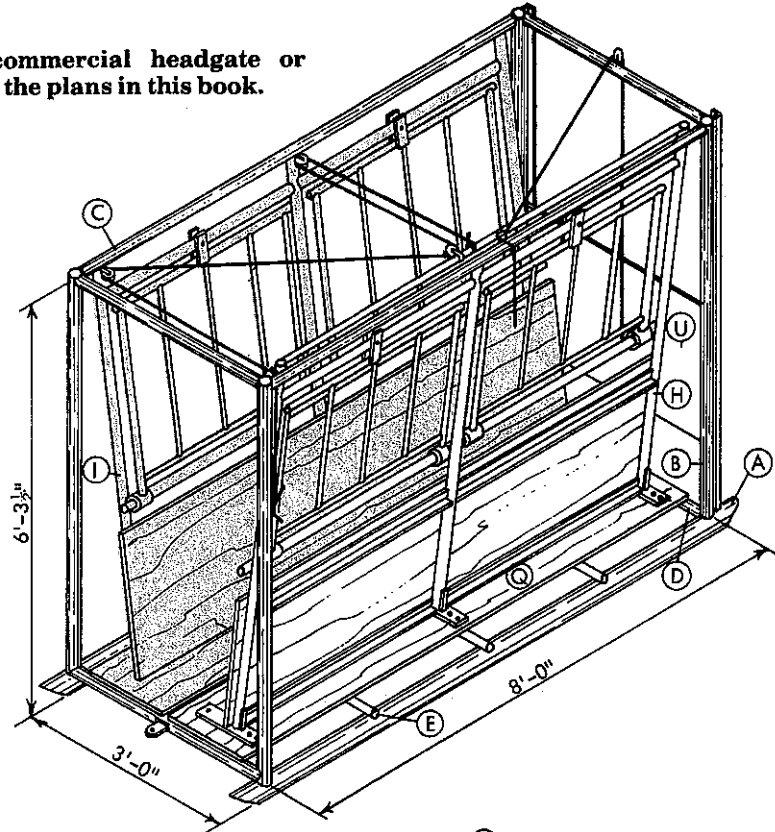
Removable Plank Detail

CATTLE SQUEEZE

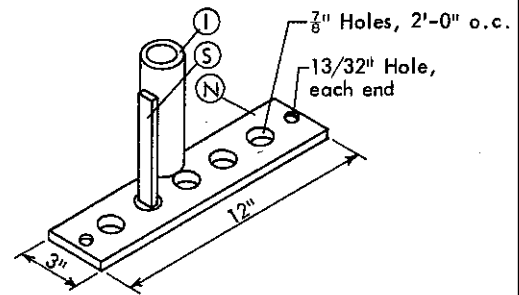
CUTTING LIST

Item	No.	Description
A	2	3" x 9" pipe
B	4	2" x 6" pipe
C	2	1 1/4" x 7'-9" pipe
D	4	1 1/4" x 3'-0" pipe
E	3	1 1/4" x 3'-4" pipe
F	1	1 1/4" x 7'-1 1/2" pipe
G	4	1 1/4" x 3'-7" pipe
H	3	1 1/4" x 6'-0" pipe
I	3	1 1/4" x 5'-9" pipe
J	2	1 1/4" x 7'-4" pipe
K	8	1" x 33" pipe
L	8	1" x 26" pipe
M	8	2" x 3" long pipe
N	3	3/8" x 3" x 12" strap iron
O	12	3/4" x 22" pipe
P	2	3/4" x 24" x 7'-5" plywood
Q	2	3/4" x 16" x 8'-0" plywood
R	4	2" pulley
S	3	3/8" x 3/4" x 5" strap iron
T	8	1/4" x 2" x 7" strap iron
U	1	3/4" x 24" x 3'-3" plywood
V	2	1 1/2" x 1 1/2" x 3/16" x 6'-0" angle
W	8	1 1/2" x 1 1/2" x 3/16" x 3'-5 7/8" angle

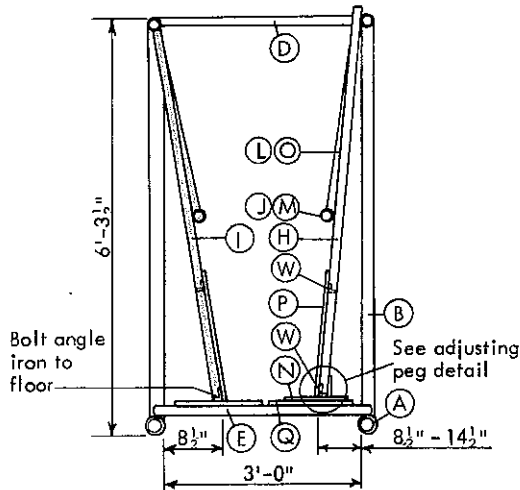
Use commercial headgate or one of the plans in this book.



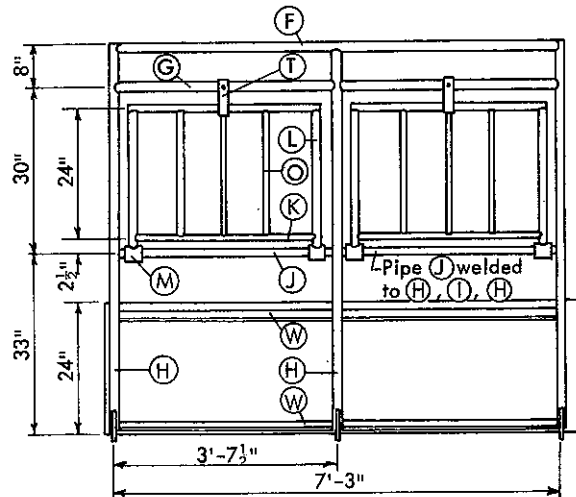
Back Gate



Adjusting Peg Detail

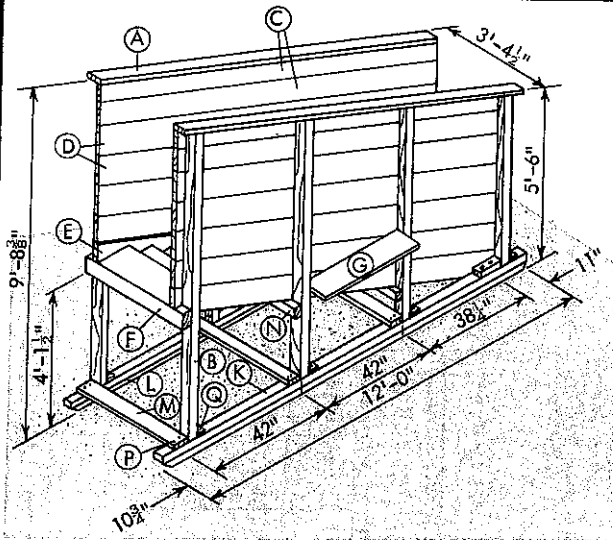


Section



Adjustable Wall

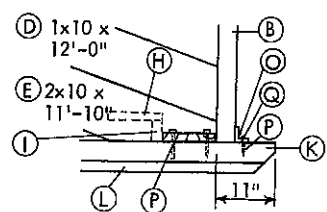
LOADING CHUTES



Item	No.	Description
A	2	2x4 x 12'-0"
B	2	4x4 x 5'-0"
	2	4x4 x 6'-3"
	2	4x4 x 7'-6"
	2	4x4 x 8'-8"
C	4	1x6 x 12'-2"
D	8	1x10 x 12'-4"
E	2	2x10 x 12'-0"
F	3	4x4 x 3'-5"
G	2	2x12 x 3'-2 3/8"

CUTTING LIST

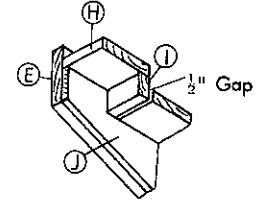
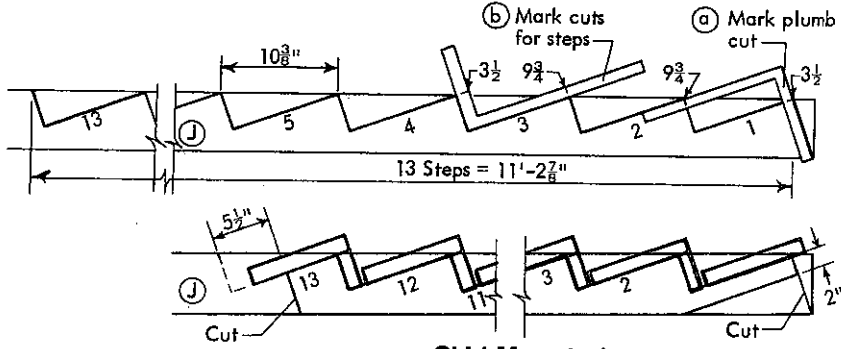
12	2x10 x 30"	& 1 - 3'-4" long
12	2x4 x 30"	
2	1x6 x 12'-0"	
2	4x4 x 12'-0"	
2	2x4 x 12'-0"	
3	2x6 x 3'-5"	
6	1/2" x 9"	bolt
8	1/2" x 4 1/2"	bolt
32	3/8" x 4"	lag screw
8	2 1/2" x 2 1/2" x 1/4" x 3"	angle



Stationary Option
 Omit skids K & L
 Omit hardware O, P & Q
 Increase length of B 3'-6"
 and set in ground.

Truck Bed Heights
 Delivery—25"-31"
 Van-type—38"-44"
 Trailer—44"-50"

1. Cut members J, 1x6 x 12' to support and space stairs. Make 13 cuts for stair treads, starting at lower end.



2. Make end cuts.

Skid Mounted



Wheel Mounted

3. Nail J to 2x10 E.

CUTTING LIST

Item	No.	Description
A	2	2x4 x 11'-8"
B	8	2x4 x 5'-6"
C	4	1x8 x 11'-8"
D	8	1x10 x 11'-8"
E	2	2x10 x 12'-0"
F	4	4x4 x 6'-0"
G	2	2x12 x 3'-4"
H	13	2x10 x 30"
I	13	2x4 x 30"
J	2	1x6 x 12'-0"
K	16	3/8" x 6" bolt
L	3	3/8" x 35" tie rod
M	2	2" x 2" x 3/16" x 3'-1" angle
N	4	1/2" x 1/2" x 3/16" x 11" angle
O	2	1 1/2" dia. x 5'-10" pipe
P	4	2" dia. x 4" pipe
Q	4	1/4" x 2" x 4" steel plate
R	2	1/4" x 6" dia. steel plate

