Plans for a Restraining Chute

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The need for a safe method of restraining camelids for routine or emergency health care is fully appreciated by experienced owners and veterinarians. The problem for many is—the stanchion type chute, which most, if not all, veterinarians agree is the safest for both animal and handler, is expensive.

A stanchion type chute, designed by Stan Ebel and Jim Hook of Colorado, has been in and out of production over the years. The demand is there, said Ebel, president of Buckhorn Llama Co., Inc. in Masonville, but it has been difficult to manage the logistics of manufacture, production and delivery and run a busy packing business**.**

What follows are plans he has drawn up, and published previously in *Llamas Magazine* (with commentary by Dr. LaRue Johnson) and elsewhere, for camelid owners to accomplish their own construction. For information regarding an already- built chute, inquiry may be made to Ebel at (970) 667-7411.

Materials

3 - 3/4" or 1" marine plywood
- 2 - 4' x 8'
- 1 - 3' x 8'
- 2 - 5" x 33"
- 2 - 5" x 57"

11 - 2" x 4" x 8' lumber for frame
- 6 - 8'
- 10 - 44"

6 - 2" x 4" x 7'
2 - 8' x 4" fence posts
1 - 1" x 3' dowling peg

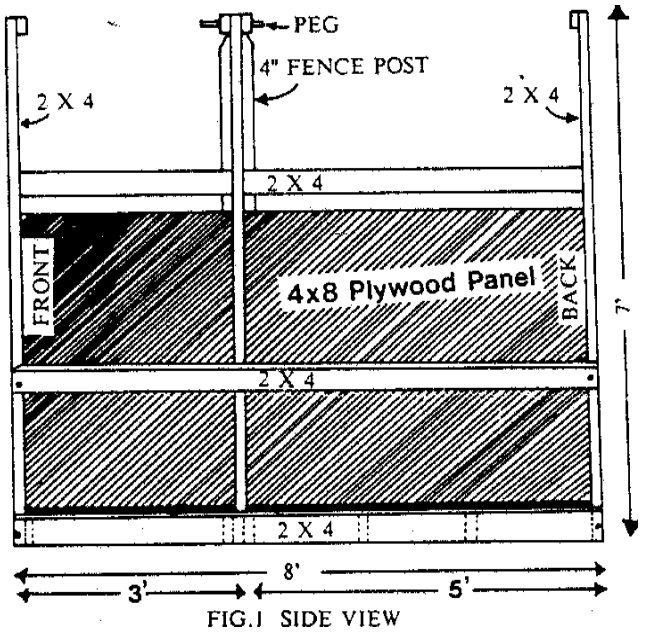
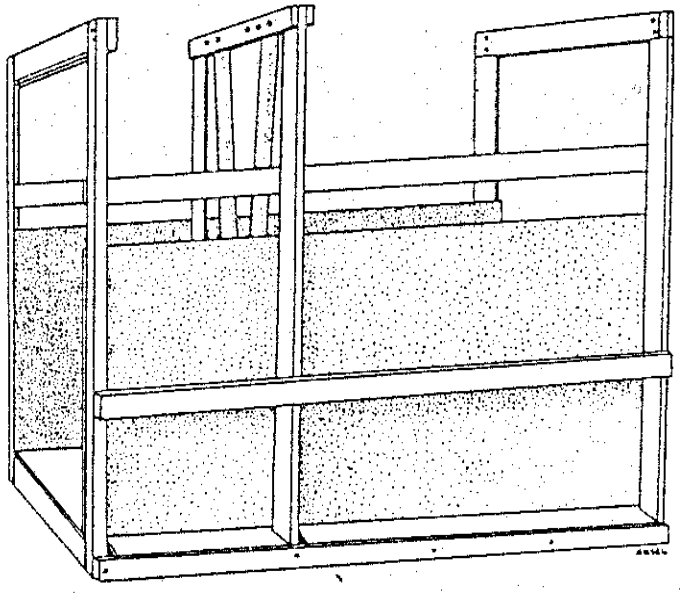


FIG.1 SIDE VIEW



Hardware
18 - 3-1/2" or 4" lag bolts with 18 washers
1 box 16p nails
2 - 1/2" x 6" eye bolts
2 - 1/2" x 4" bolts with 2 nuts and 6 washers
1 snap swivel
1 panic swivel
16 - 1/4" x 3-1/2" bolts with 32 washers
8 - 1/4" x 5" bolts with 16 washers

1. Build the three upright sections separately. Use 1/4" bolts (3-1/2" on all joints but the top of the middle section where 5" bolts are required) to secure the joints. Use washers at head and nut. The construction as is is adequate for most applications. If using on large numbers of animals, however, stability and longevity will be enhanced by adding metal angles on upper, outer corners of the frame (Figure 2 and 4). They're 1/8" plate with 8" sides. Additional 1/4" bolts are used to anchor points of angle pieces (1/4" x 2").

2. When uprights are complete, join them together with the 8' cross members. Use 3-1/2" or 4" lag bolts to put these in place. Pre-drill holes of small diameter to prevent splitting. With these in place, put in cross member in back portion of floor as show in Figure 1. nailing this in place with 16p small box nails.

3. Put in sides (4' x 8" plywood sheets). Nail in place with 16p small box or smaller ring shank nails. Next lay in floor and nail in place. Toenail sides to cross member in back floor section described in step 2.

4. Cut off posts in vertical position, even with the top of the center frame section. Then with the posts in vertical position in the center of chute, mark 1/2" below the bottom of the top cross member of the center frame section. Then cut down with a saw from opposite sides so a center section approximately 1-1/4" in width is left. Use a chisel to cut away the sections sawed down.

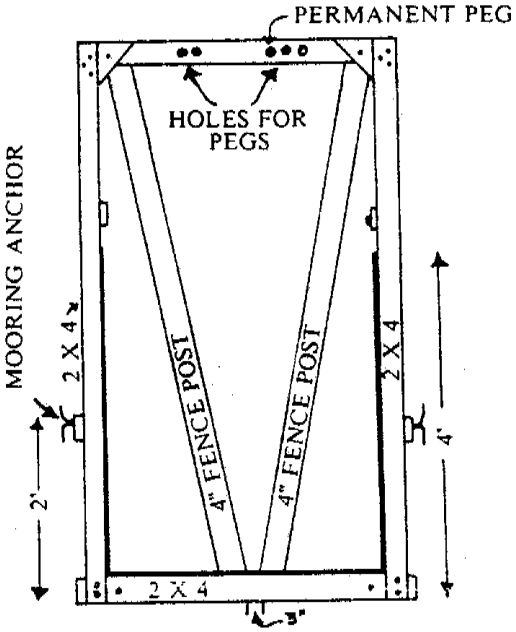
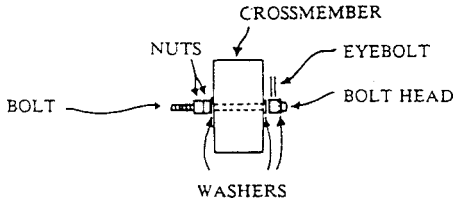


FIG.2 FRONT VIEW STANCHION OPEN

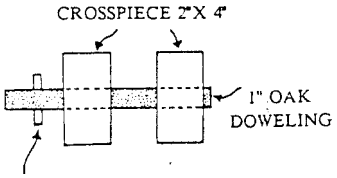
Drill a 9/16” or 5/8” hole in the opposite end of the post to a depth of 4-5”. Cut slots in the floor immediately behind the bottom cross member of the middle upright frame section. Make the slots 3/4” wide x 1-1/2 long. Put posts in vertical position and space according to Figure 2 to locate these slots properly. Now tip the chute on its side.

Place post in position in the chute while it is on its side. Be sure to place tab in between the two horizontal cross members at top of frame. Push 1/2” x 6” eyebolt through slot in floor and into hole drilled in bottom of post. Push eyebolt in until center of eye is 1/1/2” from top of the floor cross member. Mark this point and align it with center of floor slot. Drill hole i cross member. (Diameter of hole dictated by size of eye in eyebolt. Bolt must be long enough to allow washers and double nut.



Assemble per diagram. Leave loose enough to allow eyebolt free pivot motion around bolt. Tighten the two nuts against each other. Repeat for other post.

5. A series of 3-5 holes are drilled in the two cross pieces to accommodate 1” oak doweling pegs.—spaced to accommodate various options of human and llama body size. Make sure the pegs and holes allow easy insertion and removal.



6. For head restraint, two ties are used. A permanent tie is established on one side. An adjustable heavy snap swivel o the other is ideal. Attach panic strap to lag bolt anchor (Figure 2). Use a boat mooring tie down on the other side to tie lead rope to.

The animal must be haltered to use the chute. A heavy nylon web halter is preferable. The animal is led in from the back (Figure 3). The posts may be in the open position (Figure 2) or pre-set to allow leader’s body to pass to one side, while allowing llama’s head through center. Close them enough so the shoulders will not clear (see Figure 3). Attach the quick-release tie snap to the halter ring. Then pull the animal with the lead so its shoulders are firmly against the posts and its neck is extended. Then tie lead to the mooring anchor. The animal should not be able to move its head sideways or up and down. It should

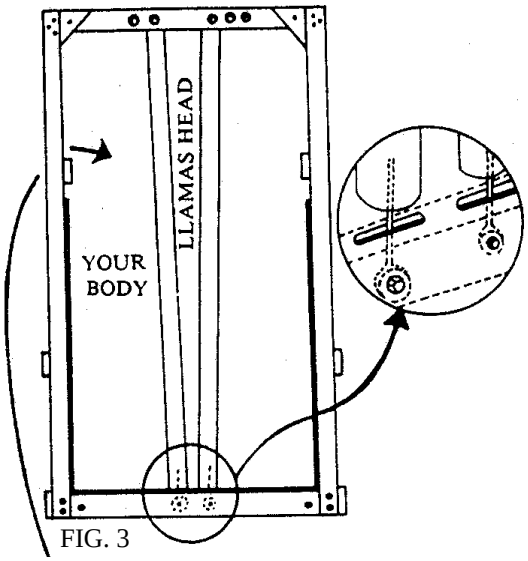


FIG. 3

not be able to move forward or backward. It it lays down, breathing should not be hampered. Do not allow animal to lie on side as under pressure will be placed on the trachea. Adjustment of the post assembly is important so it allows the shoulders to rest against the posts and they are not so tight as to put undue pressured on the neck. This is where the variable peg holes are necessary. It is also important to tie the assembly firmly to the side to minimize movement. It is best to use two people, especially on untrained animals.

When releasing the animal, untie the lead first and allow enough slack to release permanent tie. Then fully release lead to control person and open post assembly so llama can walk on through. Some large animals may require backing out. ▲

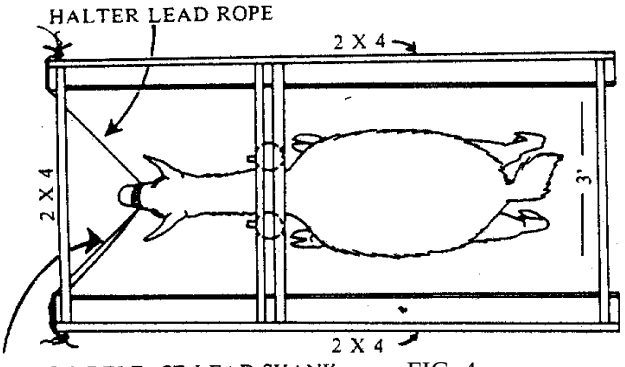


FIG. 4