

# THE DIAMOND HITCH

By J. N. Le Conte

Sierra Club Bulletin – May 1896

As there is nothing more necessary to the success as well as to the pleasure of a rough mountain expedition than a thoroughly reliable method of packing. I have prepared the following description and drawings of the Diamond Hitch, which may be of use to some members of the Sierra Club during their summer trips. I think any one who has had the slightest experience with pack-animals will have no trouble in following out the drawings alone, even without the description.

Figure 1 represents a plan of the horse, or other pack-animal, with the pack-saddle on his back. The packer stands on the left side, and throws the pack cinch on the ground underneath, as shown.

Next, he selects a portion of the rope near its other end (a. b. Figure 2) and lays it through the crosstrees of the saddle, or if the saddle be covered by the pack, along the top of the pack, parallel with the animal's length. Care should be taken that the free end of the rope X is nearest the front of the saddle. The loop b. c. d. includes most of the pack rope, and its size depends upon the size of the pack.

He then gathers up a loop of the rope just above the cinch and throws it across the pack, taking care not to twist it. Passing around to the right side, our packer grasps the rope at 1 (Figure 3) with his right hand and draws it towards him as shown by the arrow, while holding the hook H in his left. In this way the cinch is drawn up against the animal's belly. The hook should be adjusted quite low down, as it is raised when the hitch is tightened. He then passes the hook through the loop, always placing the rope which leads back to the ring R between the hook and the animal's side. Any loose rope which may be found on the right side after this operation is then thrown back across the pack. Figure 3 shows the hitch at this period.

Passing again to the left side, the packer should now cross the two ropes of the last loop, pushing the rear rope forward underneath, and pulling the front one back over the top of the other (Figure 4).

Through the diamond-shaped opening which is thus formed, he now grasps the straight portion of the rope lying underneath (a. b. Figure 2), and pulls it directly up, thus forming a third loop b. e. f. (Figure 5), which is then thrown across the pack to the right side, and subsequently forms the support for the right bag. What remains of the loop b. c. d. (Figure 2) - the portion marked by these same letters in Figure 5 - forms the support for the left bag.

If the loops have been drawn out to their proper size, a thing which can be judged by experience only, they will fit nicely around the bags, as shown in Figure 6. If not of the right size, they must be adjusted by starting at 3 and passing along the rope to 4, 5, 6, and 7.

The hitch is next tightened. Our packer stands on the right side and draws the cinch up tight by pulling in the direction of the arrow at 2 (Figure 6). When it is tight, he can hold the rope at 2 with his left hand, and, by reaching across the pack, take up the slack, by pulling it through the diamond at 3 with his right. The friction of the rope around the hook and through the diamond is usually sufficient to hold the hitch, while he passes around to the left, and still further tightens at 3. After fitting the loop around the left bag, he tightens at 4. The pulling at 3 and 4 should not be too hard, if the pack is piled up above the saddle; otherwise, the hitch is liable to be slipped forward on the animal's neck. The rope is then

drawn very tight at 5. Pulling at 5 opens out the back of the diamond, and draws up the whole hitch. The loop is then fitted around the right bag, tightened at 6; and then again at 7 the rope is drawn as tight as possible, opening out the front of the diamond.

The loose end of the rope is now brought under the left bag forming the loop g. h. i. (Figure 7), tightened at 8, and tied to the diamond at b. Figure 7 shows the Diamond Hitch completed with the exception of the final tying at b. One man can put it on without the least trouble, though it is sometimes convenient to have a second man to take up the slack at 3, while the packer is pulling at 2. In the true Diamond Hitch the loose end X is never pulled through - in fact, it is never handled at all. The pack is made with equal ease, whether this end lies upon the ground or is tied about the animal's neck.

In conclusion, I would remind the packer that the hard pulling must be done at 2, 5, and 7, and that it is the opening out of the diamond which is most effective in tightening up the hitch.

