

BASKET SLEDS

By Oliver Cameron
with Ole Wik

Sleds can be a big subject. I've made several basket sleds, and once made them to sell, but I don't have any right now. I usually made two other types of sleds. One was a much simpler ski sled that was easier to build, and was in many ways more practical. The other was a heavy sledge for dragging behind snow-travelers. I've described both elsewhere.

It's beyond me to describe all the details about basket sleds, but I can give a few. I'll start from the bottom.



Don Williams building his basket sled in front of his sod iglu.
Spring 1965, Ambler area. Image: Ole Wik

Runners

When a trail is used repeatedly, it gets solid and tends to form a crown as the snow builds up. A sled that is going to be used in that kind of situation has an advantage if the runners are 1 or 1-1/4" closer together at the front of the sled than they are at the back, assuming the sled is at least 10' long.

If you're on wooden runners, you can shape the bottom of the runner so that it is a little curved in cross section. That way the center of the runner will be in contact with the surface of a hard trail, but a wider area will support the sled when the going is soft.

If you have an iron or steel shoe on your runners, you can lay a straightedge across them and have it so that the inside edge of the runner is against the straightedge and the outer edge is down 1/8" or more.^{1,2} Then when you're traveling on ice, for example, you'll be running on a very narrow inside edge. The sled will pull easier, and the runners will tend to bite so that it doesn't swing around so much.

Also, if you're traveling on a domed trail and the sled starts to slide off to one side, the upper runner will have a better grip on the trail, while the runner on the down side will slide without grabbing and won't tend to bite and tip the sled over. And since the runners are a little closer together at the front of the sled, the one on the down side will have less purchase than the one that is up on the trail, and will be pointed toward getting you back up on the trail again.

These considerations about the tilt of the shoe and making the front part narrower apply to all sleds.

Brake

For the brake, I put a thin board, maybe 5 or 6" wide, right down the center of the sled, underneath the crosspieces. You can leave that fastened to the floorboards 2/3 of the way toward the back, but leave a section of it loose so that when you step on the brake it can go down a little bit.

The brake itself should be hinged so that it will go down into the snow when you step on it. In some cases it's made with long enough sides that it can be suspended on two springs that are fastened in a "V" shape to the handlebar area. In that case you can have the board fastened all the way.

The board will have a tendency to work side to side, so you need to tie ropes from the back of it to the frame somewhere ahead. If you were to tie it right square at the back, it would be so tight that it would interfere with the brake dropping down. But if it's tied ahead three feet or so, there will be enough give that you can depress the brake board enough to get hold of the trail.



Sasha Wik stands behind her sled. Notice the brake board, side-to-side tether ropes, hinged two-prong brake, and spring. Image: Ole Wik

You can make a brake out of a piece of angle iron fastened onto the back of the board. You cut teeth into the part that's facing down, and you curve up the upper part a little bit at the ends to keep your foot from sliding off. Both curved ends extend upward about 1-1/4". There is a hole in each end, and then there's a fairly stiff wire fastened from one hole to the other to make a loop or inverted V shape. That fastens to a spring that holds it up.

Sled anchors

Sometimes it's convenient to tip a sled over, but not always. When I was checking my net out on the ice, I'd tie my lead dog to a piece of metal that I stuck in the ice. The team was also held at the back by the sled anchor.

My favorite anchor was made from a piece of rebar, folded in the middle and then bent at each end to form two hooks that bite into the ground or snow or ice. Those hooks have to be bent ahead at such an angle that a tug will tend to pull the anchor in deeper.

Then it had a foot piece fastened across it that was wide enough that I could get my weight on it, about 2-1/4". I adjusted the anchor rope so that I could hook the anchor over the crossbar on the back of the sled.



Many of us used actual boat anchors, which will grip even when they flip over.

Image: Dorene Cameron Schiro

Yoke

You'll want to attach the yoke for the tug line back underneath a ways. That will give you more leeway in steering the sled, helping it stay up on the trail and so forth. The farther forward your yoke is fastened, the more control of the sled your dog team or towing force has, and the more difficult it is for you to steer the sled and shift it back and forth.

The longer your yoke is, the more sensitive your sled will be to a change in direction of the team when the dogs start around a curve. There will be more strain on the leg of the yoke that's on the outside of the curve, so there again your team will have more control.

If your yoke is shorter and you're on a crooked trail, snaking back and forth, you'll have more control from the back of the sled. You learn to prevent that by throwing your weight one way or the other to scoot the sled over a little bit. On the other hand, if you go off the trail with a loaded sled, it will take a lot more work to get it back up.

I usually fastened the yoke to the second stanchion, with a ring tied in the middle for the tow line. The anchor rope went back from the ring and came out from underneath through the side of the sled, usually just behind the second stanchion. As I am right handed, that would be on the right side of the sled.

Sometimes, especially in the spring, the main flat area of the river or lake will be soft, but there will be more solid ice or snow along the edge. It will almost invariably be sloping, so that your sled will constantly want to pitch downhill.

To account for such situations, I made the yoke inherently off center, with the longer arm on the side where the anchor line was tied. That would naturally cause the sled to track toward that side.

I'd stow the anchor atop the crossbar, by the handles. For normal travel, I'd put some tension on the anchor rope in order to make both arms of the yoke equal, so that the sled would track straight ahead. If I tightened the anchor line even more, the sled would track toward one side, and if I slacked off completely, it would track the other way.

That adjustable feature was very handy whenever the sled was starting to pitch downhill off the trail on a slippery slope. By adjusting the tension one way or the other, the yoke would pull the front end of the sled back uphill.

For a short run across a slope, I could adjust the yoke by just getting hold of the rope and pulling or slackening it. For a somewhat longer run, I could increase the tension by moving the anchor.

If my sled hook happened to be on the wrong side for that particular slope, I'd take it ahead, run it underneath the sled, pull it out on the other side, and set the tension so that the yoke pulled a little more on the downhill side.

Did you dream that up?

I suppose. I never saw anybody else do it. It's just common sense. If you've been running alongside the sled pulling the front end up, that gets tiresome pretty quick.

1) This essay stems from a series of telephone conversations that Ole Wik had with Oliver between December 2007 and February 2008. Highlighted text indicates remarks made by Ole.

2) **Oliver is describing the measurement when the sled is upside down.**