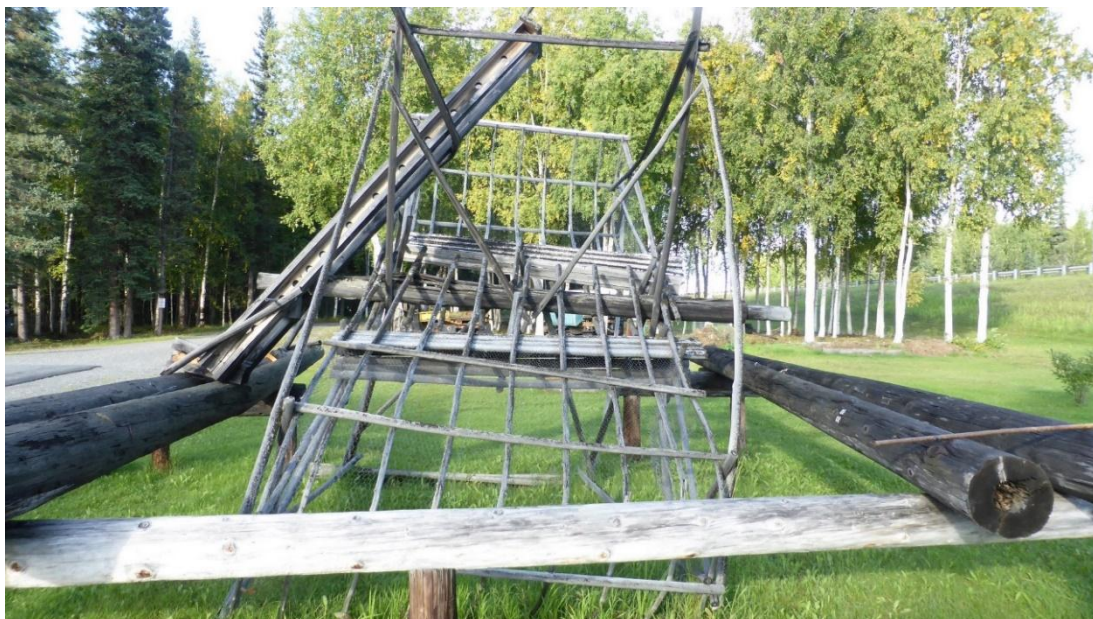


## Water and Wheels in Alaska and the Yukon

*Ashok Vaidya*



At a remote wayside stop on the road north from Anchorage to Fairbanks in Alaska we came across this interesting and delicate construction of timber. It looked as though some part of it rotated about the axle and there seemed to be a grid of laths on either side of the cross pieces. Some form of waterwheel? But what did it drive and how did it work?



The answer proved the ingenuity of the local population in these far flung parts – it was a fish wheel. Designed to sit in a fast flowing river, the water flow turned the ‘buckets’ of laths, and as they rose out of the stream they lifted any salmon that were unlucky enough to be passing upstream at that moment. Not only that, they were designed to tip the salmon out at the top of the rotation into a chute that directed them into a net or holding pen at the side. Ready then for the fisherman to scoop them up and eat, smoke or otherwise preserve for the long icy winters ahead.

We saw a small model of one in the museum at Dawson City in the Yukon, Canada, which being more complete allows a clearer understanding of how it works.





So a waterwheel producing energy – not directly mechanical like our river mills, but directly chemical in the form of juicy sockeye salmon steaks.



At the Chena Indian Village there is a working example of the fish wheel, and there are clips on YouTube of them in action:

<https://www.youtube.com/watch?v=b5N0okA-Aok>

<https://www.youtube.com/watch?v=IarZQFsDAiM>