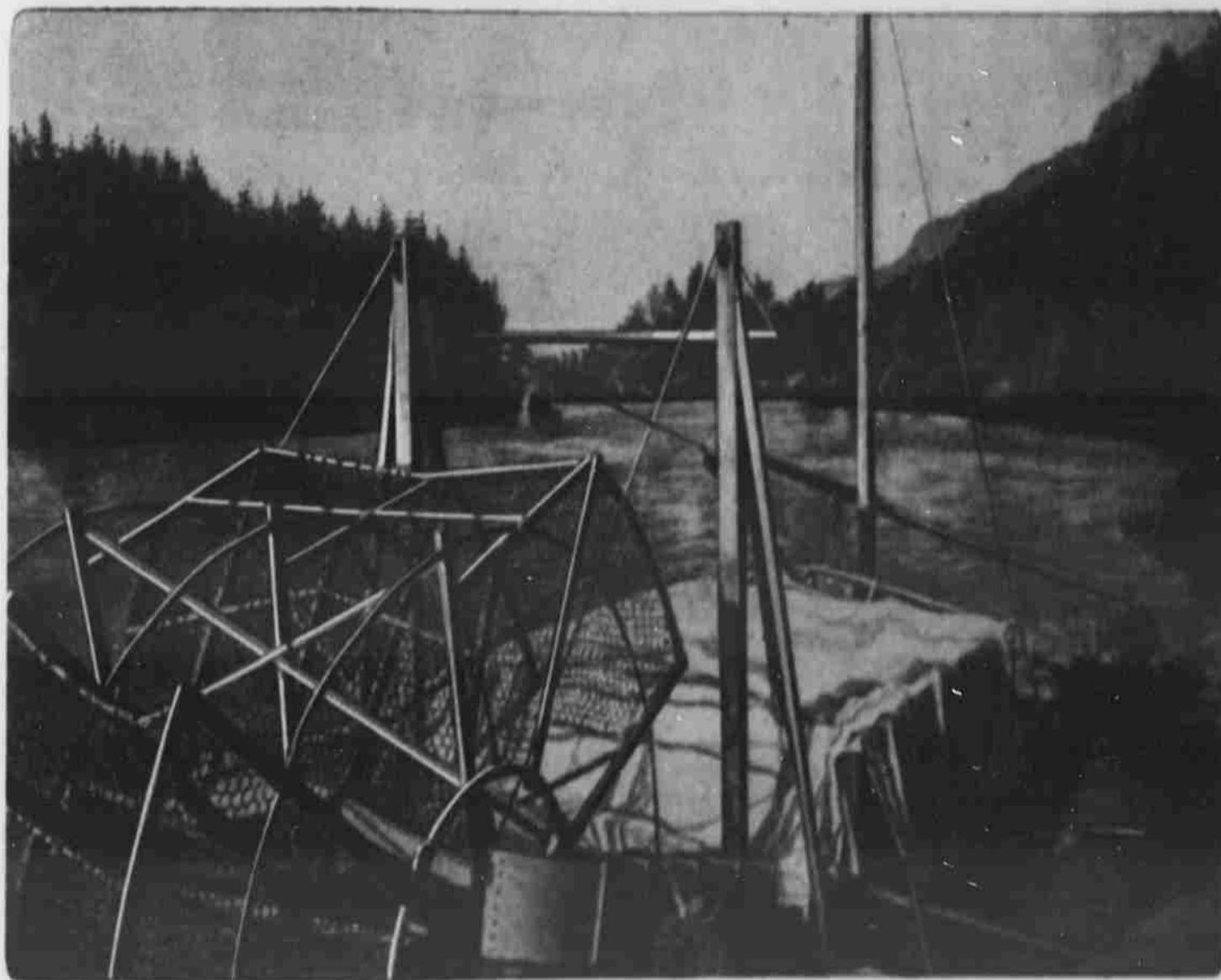


shell it is about an inch long, and carries under its body a little round sack, the yolk of the egg it came from, on which it lives by absorption for about a month longer, till its mouth is sufficiently completed to take food and its other organs to dispose of the food it takes. When first hatched, it is a clumsy looking and awkwardly moving object, being about as graceful and efficient in its attempts to swim like a fish as a human beginner's attempts are to ride a bicycle. After it has lived in its sack a week or two, it develops a disposition to dive and hide under something, which it does with a pertinacity which is both

larger fishes above. So, like the early Christians in the Catacombs, it spends a large portion, if not all, of its early life in or close by the under-world where it was born. As it gets larger, it ventures out and takes its chances for life in the world of waters above it, usually, I think, going up some brook or keeping near some rocks, or close in shore, where it can retreat to a place of safety when alarmed. It feeds now voraciously on whatever it can find in the way of smaller fishes and insects, and other animal food in the water, and in a few months, probably not over six or seven, it joins the host of its comrades, of about the



A SCOW FISH WHEEL ANCHORED TO THE BARGE.—SEE PAGE 520.

characteristic of the full-grown salmon and prophetic of the tenacity of purpose it will show in ascending its breeding rivers to spawn. This irresistible instinct to dive and hide takes it still deeper under the gravel and rocks in the bed of the river which formed its birth-place, and it stays here in the crevices of the rocks and gravel as snug as possible until the sack of food which nature started it in life with is gone and it is obliged to work for a living or starve.

"It would not be safe now for the little, helpless creature to venture out of the rocks and gravel where it was born, for it would undoubtedly pay for its rashness by becoming food, while yet alone, for the

same size, which are preparing to go to sea, and forming a school, which without doubt gathers myriads of recruits as it proceeds, it hastens with all its might down the stream. It is now a beautiful, silvery fish, from four to six inches long, and in a few days finds itself in the midst of the allurements and dangers of the great unknown ocean which it is so eager to seek."

Mr. G. W. Williams gives the following interesting details as the result of his observations through a series of years on the Columbia and Snake rivers and tributaries of those streams:

"The spawning grounds of the Chinook are the Snake river, as far as Shoshone falls, and its tributa-