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tree or one damaged in summer. Spruce gum could be accumulated by stripping a narrow length of bark from trees early in the spring and then, during warm weather, gathering the resin that appeared at the bottom of the scars....Tempering, done after the gum was melted, consisted of adding animal fat and a little finely powdered charcoal. The mixture was then tested by dipping a strip of bark into it and then into cold water. The strip was bent to see if it cracked the spruce gum; if it did too much tempering material had been added and more gum was required. If no cracking occurred, the gum on the strip was held in the hand for a few moments to see if it became tacky or could be rubbed off the strip; if either occurred, more tempering was needed....For repair work, when melted spruce gum could not be procured in the usual manner, hard globules and flakes of gum scraped from a fallen tree were used. These could not be easily melted, so they were first chewed till they were thoroughly softened; then the gum was spread over a seam. This type of gum would not stick well unless it were smoothed with a glowing stick, and hence was used only in emergencies." All seams are now covered with gum on the inside of the canoe. "The gum is heated until it pours like heavy syrup,, it is worked into the seams and smoothed by rubbing with the thumb dipped in water to prevent the gum from sticking and burning....When the crevices are filled, a piece of bark (in later times a piece of cloth) wide enough to cover the gum alongside is well-smeared, with warm gum and pressed down" into the end seams. "On each seam, at gores, and on the side panels a thin narrow strip of bark is smeared with gum and pressed over the seam after the latter had been well padded,...Great care is taken to obtain a flat surface." The canoe is now ready to be sheathed and ribbed out. The splints of cedar sheathing are about 5 to 9 feet long, 3 to 4 1/4 inches wide and between 1/5 and 3/16 inches thick. They will taper from the butt to fit together at the curve of the canoe end. They will lie along the bottom and walls of the canoe roughly edge-to-edge with the butts, whittled to a feather edge, overlapping about 2 inches amidships • held at first by pieces of basket ash as temporary ribs, and then by the cedar ribs. The bark and stitching must be kept wet so that the rounded form can begin to emerge. "Particular care is required in finishing the sheathing below the gunwale to be certain that the top strake will be close up against the sewing of the bark at the gunwales." Sheathing is neither pegged nor lashed; it is held on? ly by the pressure of the ribs and the resistance of the bark. A total of 50 or more ribs in 5 lengths, the longest about 5 feet, are made from white cedar heartwood and bent to shape. For the Micmac canoe, "the ribs or frames were thin, about 1/4 or 5/16 inch thick, and across the bottom of the canoe they were often 3 inches wide. In the topsides the ribs were tapered to about 2 inches in width; when the bottom and outboard corner of the main gunwales were not beveled, the rib ends were cut square across on the wide face and chisel-shaped. When the gunwale corner was beveled, the ribs were formed with a sharply tapered dull point at the ends,...'nie shape of the canoe is controlled by the shaping given the ribs in prebending,...No fixed rules appear to exist; the eye and judgement of the builder



are his only guides....He can prebend ribs in pairs to a number of arbitrarily chosen shapes:the first set of of 6 pairs to the desired midsection form; a second set of 5 pairs to the form of the section between the middle and the first pair of thwarts; a third, of 5 pairs, to the section at the first thwarts each way from the middle; a fourth, of 4 pairs, to the section between the end and the first pair of thwarts each way from the middle; a fifth, of 3 pairs, to the section at the end thv;arts; and a sixth of 2 or 3 pairs, for the section at or near the headboards. This makes 50 to 52 ribs in a canoe measuring 18 or 19 feet overall. Each rib is treated with boiling xvater and then bent, over the knee or around a tree, to a slightly greater degree than is Cape Breton's Magazine/II