

HISTORY OF AMBROID GLUE

An article published in the May 2012 edition of MaxFax, Stew Meyers, Editor

While cruising the web, I stumbled across this fascinating history:

Before Ambroid glue, you patched the birch bark or canvas on your canoe with spruce gum. It was an art and an ordeal. You gathered dried knots of pitch from spruce or pine trees. These were nurtured with patience from the trees by creating gumming notches. You harvested the knots and took them on trip with you. When you sprung a leak you started up a fire and rendered them with fat. The gum was applied while still hot. And if you didn't get your mix just right!

In 1900 the canvas canoe was on the cusp of revolutionizing canoeing and launching the canoe-building industry. Charles Seavern, president of Howe & French, Inc. a Boston chemical company, was an ardent trout fisherman and canoeist. He was more than familiar with the time-consuming, messy gumming process from his Maine fishing trips in birch bark canoes. Howe & French processed used tortoise-shell glasses to recover camphor. The leftover celluloid was burned. Celluloid had made its debut as the first plastic. It was little more than cellulose, obtained from plants such as cotton, and camphor the plasticizer. As plastic was waterproof, it occurred to Seavern that a replacement for gum could be made from this waste. No more pitch gathering. No more fires. No more rendering. Just open a tin can and apply. It might have some color problems but the bottom of a birchbark canoe was not a designer's paradise. And since his company had waste celluloid to burn, the price of the raw material couldn't be beat.

With testing, Seavern found that his glue exceeded his original hopes as an adhesive, not only for birch bark, but the new canvas canoes as well. It was fast-drying, flexible, strong and above all, waterproof - as the packaging would later boast. Two words, amber (its color) and celluloid were combined to create the brand name Ambroid.

The liquid plastic was sold in small, round tins to sporting-goods outlets and in larger one-gallon cans to canoe-repair shops. Old Town Canoe Company became one of the first customers of the Ambroid Company, apparently even for a time, providing a tube with each canvas canoe sold. Old Town still sells Ambroid in its Wood/Canvas Repair Kit. Hudson's Bay Company became another early customer, selling large quantities across Canada through its posts and inland stores to hunters, trappers, surveyors, prospectors and natives. Ambroid is still sold by the successor, The North West Company, which operates the inland stores.

Old-time builders swear by the stuff for patching canvas. "I had an old canoe come into my shop with a complete double bottom of canvas glued on with Ambroid," says Rollin Thurlow, of Northwoods Canoe Co. in Maine.

Northern Ontario-based Camp Keewaydin, founded in 1894, is the world's oldest canoe-trip operator. As one of the few

institutions still running whitewater in wood-canvas canoes, its six-week trips into remote areas carry a pound and a half of Ambroid. As you can imagine, the staff are adept at handed-down, backwoods, canvas-repair tricks like double-patching and burning on a patch, all with Ambroid.

The reconstituted tortoise-shell glasses did not immediately go into lead tubes because the lead caused the cement to gel. Citric acid was eventually added as a preventive. With the adoption of the tube, it replaced tin cans on canoe trips. Old-timers have told the Ambroid Company that it lasts for decades in the tubes. (Today, lead tubes have been replaced for safety and health with annealed-aluminum tubes.)

Not only was the amber liquid one of the world's first plastic glues (chemists like to point out it is not a glue but a cement), but it became one of the most widely-known brand names in the wood-canvas canoe industry. You didn't leave home without it. Its ease of use revolutionized repairs and must have helped accelerate the popularity of the canvas canoe.

The original Ambroid, marketed as Original Liquid Cement, is still popular with hobbyists who use it on wood models because it bonds so well to porous materials. It is widely available at hobby shops. Though sales of Ambroid to canoeists have fallen with the decline in wood-canvas canoe use over the past three decades, the first commercial canvas cement is still holding on patches and outshining today's high-tech glues.