

Bennett had been interested in faster exposures since 1879 when Metcalf had first written to him of a "snapper," and a later letter from Metcalf mentioned, "While in New York I saw at Scoville's an exposing shutter exactly on the same principal as the one you made me—only it is placed inside the camera and just behind the lens and operates by a brass pin attached to the shutter sticking up through the top of the camera." He attached a small sketch. "Of course it is not to be spoken of in respect to quickness with the one you made for me; but it is out of the way, inside of the camera and can be used with any pair of lenses or with only a single lens. The camera would have to be just so much larger. If the rubber band be attached or not I can't say. It was in a Philadelphia box." The next year Metcalf referred Bennett to an issue of the *British Journal of Photography* for an article about instantaneous shutters.

In 1886, Bennett finally came up with a design for a fast shutter, which was a complex contraption fastened in front of the lenses of a stereo camera. Across the openings a slide of thin, hard rubber with two openings was moved

from side to side by an arrangement of springs and levers to which one or more rubber bands could be fastened to speed the action. Except for Metcalf's letters, nothing in the studio records indicates where this idea originated. It was, like most of Bennett's inventions, something he needed, so he built it.

With this newfangled instantaneous shutter, Bennett was now able to photograph things he had never been able to before. One photograph shows young Ashley Bennett suspended in midair, leaping across the chasm at Stand Rock. This photo became one of Bennett's most famous, but there was initial scepticism. Early in his career, Bennett had made some "deceptive" photos (which were secretly referred to as fakes) that involved scratched-in moons, for "moonlight effects," and miniature Indians placed inside rock "caves" for picturesque stereo views. Naturally the first instantaneous photographs that Bennett made were passed off as merely more of Bennett's fakes.

The refinement of his instantaneous shutter freed Bennett to photograph something he had always wanted to record: the lumber rafts on the Wisconsin River.

Two stereo views listed in the 1883 catalog showed rafts going over the Kilbourn dam. These were taken with early shutter designs and were shot from a distance too great to depict any interesting detail. Bennett was dissatisfied with them but was unable to improve on them until 1886.

When logging began in Wisconsin, the river that stretched the length of the state and entered into the Mississippi proved to be the most efficient way to move lumber to market. From

the beginning of Kilbourn, the weekly paper reported on the shipments of rafts that moved through the Dells. That very first spring the river rose five feet and rafts were running.

Typical Wisconsin lumber rafts were not made of logs but of sawed pine lumber pegged together in "cribs," sixteen feet square and fastened, one behind the other, in strings, or "rapids pieces," seven cribs long or less. The leading crib was connected to the one next in line by two long limber saplings called spring poles in such a way as to lift the leading edge a little. At the end of the string, a long, heavy steering sweep was placed. On deck they carried a cargo of lath and shingles, together with sleeping quarters for the crew and a shelter for the cook and his stove. A rope, called the sucker line, could be rigged down the center of the raft so the crew could hold on and not be swept overboard in rough water. Where the river was wide and had no rapids or other difficult spots to navigate, rafts might drift down the river fastened three strings wide, held together by wooden strips called bridles. At the head of the Dells, near the entrance to Witch's Gulch, rafts would usually be separated into the narrower rapids pieces and each would run the Dells with a full crew aboard.

The toughest spots in the Dells were the right-angled turn at the Devil's Elbow in the Narrows, and the dam at Kilbourn, especially when the river was at flood stage. At such times, when the river at the Narrows was wildly turbulent, fleets of rafts would stay tied up at the head of the Dells until the water level subsided to a safe point. Sometimes the dam at Kilbourn would be equally impassable, and there would be so many rafts tied up between the Jaws and

Kilbourn that it would be possible to walk over the river from town to High Rock. Below the dam, rapids pieces were again joined together for the rest of the trip.

Raft crews of about twenty men were made up of some of the men who cut timber in the Wisconsin pineries during the winter; some were from nearby farms. The visits of the rafting crews to town were fairly boisterous; a section of Superior Street was known as Bloody Run, and supposedly became the scene of many revels. The town marshal often found himself tied up and deposited in a safe place, "so he wouldn't get hurt," during the festivities.

By 1886 it was thought to be unprofitable to ship lumber in rafts. An editorial writer suggested that the railroads do the carrying business and leave the navigable streams for utilization of power for factories. Rafting was falling off, and Bennett had to capture it on film before it died altogether.

With his homemade instantaneous shutter and the now reliable Cramer dry plates, Bennett was able, in autumn of 1886, to board the Arpin fleet at Kilbourn. His son, Ashley, had signed on as his assistant. The lumber for the rafts had been sawed at Germantown at the mouth of the Yellow River, at the Arpin and Sherry sawmill, twelve miles from the railroad at Mauston. Bennett and Ashley journeyed with the crew for well over one hundred miles, as far as Boscobel, where Bennett ran out of plates.

Bennett reported to Arpin after the eight-day trip: "We had a glorious time and made lots of pictures, how good they will be I cannot say as I have not yet developed the plates. Most all I done was illustrative of rafting or raftman's life,

leaving the scenery along the river for another trip, which I hope to make another season."

About thirty good views resulted from the expedition, and Bennett planned to send some to the Arpins "in return for favors to myself and my son." In the two scenes with the cook, Ashley, age seventeen, is the cookee.

The most startling photograph, and one that caused quite a sensation at the time, is entitled, "We Are Broke Up. Take Our Line!" It shows a rope, thrown by a raftsmen, stopped in midair. Other photographers suggested that the rope had been frozen or somehow hung up in the air, another of the Bennett fakes. But it was the instantaneous shutter at work. Another unusual action picture was taken from the rear of a raft just as it plunged over the dam at Kilbourn with the steersman hanging to his oar and water boiling up among the planks of the raft.

Since he had come to Kilbourn as a boy it had been a secret desire of Bennett's to join the rugged raftsmen for a trip downriver. Now, at the age of forty-three, and with his instantaneous shutter as an excuse, his dream had finally come true. The raftsmen series was added to the list of available stereos.