

BENT SHAFTING.

Who is not bothered occasionally by shafts that are bent somewhat? Every miller, I suppose. A wooden shaft can be straightened by taking hard seasoned lumber and baking it in a stove or oven until it is baked as small as possible. Then it can be dovetailed into the shaft at the crookedest part. Straightening an iron shaft is a more delicate matter, but it can be done by fixing three or five points of stone or iron, so that the shaft will not affect them, and so that the upper surface will be in exact line. Then lay the shaft upon them and fix it firmly, so that the bend will be up. Build a fire along the shaft and heat it evenly the whole length, when a comparatively light pressure will bring it down until it touches the points previously leveled or fixed in line. Then allow it to cool, and it will be found to be straight. The shaft must not be heated so hot as to cast a scale. The following is another plan of doing the same thing: Support the shaft at the extremities, and when left free to adjust itself, the crooked or convex side will be down. Then fasten it securely at either end, so that it cannot move, and apply a lever directly under the bend. While forcing it up from below, pound from above with a heavy sledge, which will expand or lengthen the concave side, and gradually bring it straight. But, after straightening, the hammered part must not be turned off, as it would again resume its crooked shape.—*Ex.*

BARB WIRE FENCES.

In the case of Hillyard vs. the Grand Trunk Railway Company, a Brockville jury awarded the plaintiff a verdict of \$225 for the loss of a colt from the Maud S. stock, which died from injuries received on a barb wire fence erected by the railway along the highway. The mare was being taken to pasture, led by a halter, and the colt was frisking around its dam, when it ran into the fence, receiving several severe cuts, from which it subsequently died. Mr. Justice O'Connor, in his charge to the jury at Brockville, seemed to lean to the view that a railway is bound by statute to fence its track from the highway, so as to protect the public and the property of the public from injury, and having so expressed himself he left it for the jury to say whether a barb wire fence was such a one as would satisfy the statute, and if not whether the colt was sufficiently under control, and then did it die from the injuries received. The jury gave a verdict in the plaintiff's favor. Yesterday Mr. W. Nesbitt moved before the Q. B. Divisional Court to set aside the verdict, and enter a verdict for Defendant on the ground that the statute only requires a railway to erect such a fence as will keep cattle off the track, and that a barbed wire fence is a legal fence, unless it is proved to be a nuisance. In support of the motion also, it was contended that the colt was not properly in charge, and that in any event it did not die from its injuries. Messrs. M. E. O'Brien, of Prescott, and G. H. Watson supported the verdict. The argument was very interesting, counsel for plaintiff comparing a barb wire fence to a miniature array of small daggers, while for the plaintiff it was described as an invention to prick the animal slightly, and prove more effective for the purpose of keeping the track clear. The court was free in remarking upon both sides of the case, the Chief Justice comparing the fence to the Scotch thistle with the motto attached to it, *Nemo me impune lacessit*, while on the other hand one of the Justices favoured the fence, and said it was objected to only because it was new, referring in illustration to the language of the Duke of Wellington, to the effect that it percussion caps were introduced into his army, men would shoot each other, and the consequence would be calamitous. Judgment was reserved.—*Toronto Mail.*

THE MYSTERY OF NIAGARA.

The mysterious and awful depths of Niagara's canon are fruitful subjects of comment. Some portions of it are reasonably supposed to be bottomless. When the first railway bridge was constructed here some ambitious persons attempted to sound the canon directly beneath it. They filled a large tin pail with stones and lowered it. The currents merely played with it. Then they took a stronger cord, attached a

bar of railway iron to it, which actually floated, owing to the fierce counter currents.

A few years ago the United States lake survey came here, and, as a recorder of the survey, I know of the remarkable data obtained. We saw at once that the current would buoy up a large sinker, and proposed to test the smallest possible weight. We took a lead weight in the form of a plum bob, weighing thirteen pounds, and attached it to a small but strong cord. Then we secured the services of one of the ferry boatmen and started out into the stream. The boatman was ordered to row as nearly under the falls as possible, and the result will never be forgotten by a member of the party in that staff.

As we approached the falls the roar became more and more terrible, until we were not only unable to hear, but the lips positively refused to open and utter a sound. For several days afterwards some of the party were so deaf as to be unable to distinguish one word from another. The lead was cast first near the American falls, where bottom was found at eighty three feet. Near the main falls we found one hundred feet of water. Here the carman's strength failed, and the little craft began to dart down stream.

At every cast of the lead the water grew deeper, until in front of the inclined railway the old guide and most of the party became horror-stricken and refused to go further down stream. Here the water told off 193 feet. We were then able to compute the depths lower down by simply ascertaining the width of the stream. Directly under the lower bridge the water narrows considerably and deepens to 210 feet. Lower down, at the Whirlpool rapids, the gorge gets very narrow and the current terribly fierce. Here the computed depth was 350 feet. One place in the gorge is still narrower, and would exceed a depth of 400 feet.

When the depth of the water is taken into consideration the height of the canon walls above the surface must not be forgotten. These walls range from 270 to 350 feet in height, often perpendicular, so that the total depth of the canon ranges from 250 to 700 feet. This great depth of the gorge leads directly in imagination to the canon's wear.—*New York Times.*

LIST OF PATENTS.

The following list of patents upon improvements in wood-working machinery, granted by the United States Patent office, June 2, 1885, is specially reported to the CANADA LUMBERMAN by Franklyn H. Hough, solicitor of American and foreign patents, No. 925 F. St., N. W., Washington, D. C. :—

- 319,373.—Cant hook—J. Winobrenner, Hocla, Ind.
 319,071.—Lathe tool holder—C. W. Coleworthy, Boston, Mass.
 318,938.—Saw, circular—E. Allen, Norwich, Conn.
 319,181.—Saw mill carriages, etc.—E. M. Birdsall and G. Stringer, Ark.
 319,019.—Saw set—A. F. Peelman, Kensington, Ill.
 318,076.—Saw setting device—T. Gibbons, St. Louis, Mo.
 319,425.—Saw tooth swage—J. M. Ryan, Vicksburg, Mass.
 319,262.—Saw swage—A. Jacobs, Cheboygan, Mich.
 319,395.—Sawing machine circular—W. H. Doane, Cincinnati, Ohio.

High-Priced Art.

"My, but those art works do run into money," remarked a passenger whose breath smelled like the south side of the Ohio river. "It beats all what fools some folks make over pictures. When I was in Chicago I saw a little painting about a foot square that was held at \$500. Spect some simpleton will come along and buy it. If I had a million of money you'd never catch me paying \$500 for a little painting like that."

"That's the way you talk," spoke up a bashful drummer, "but I'll bet you paid four times as much money for a painting not a tenth part as big."

"What, me?"

"Yes, you."

"What kind of a painting?"

"The one on the end of your nose."—*Chicago Herald.*

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**A Steamer Burned.**

The steamer Peerless, of the Ottawa Navigation Company's line, took from Montreal to Montebello a large excursion on Wednesday. She had taken on the most of the party for the return trip when the fire broke out. The steamer had to be taken out and settled to save the hull and machinery. The steamer was valued at \$90,000, and was insured, but was not entirely destroyed.

Don't disgust everybody by hawking, blowing and spitting, but use Dr. Sage's Catarrh Remedy and be cured.

A Disastrous Fire.

The town of St. Cessaire, Que., suffered severely from a fire on Tuesday night. The residence of the Hon. Senator Chaffar was burned, together with seventeen other houses. The burned out residents were nearly all well to do people. The damage is estimated at \$150,000, but the loss, in most cases, is partially covered by insurance.

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