

Text of the reporter's article

(from a newspaper clipping, found in box 13 of the James Fisher collection at the Michigan Tech archives and Copper Country Historical Collection, source and date unknown, the numerous typos, etc., were copied as they appeared.)

It is an interesting fact, and one not generally known that nothing that falls from the mouth of the deepest mining shaft in the world ever reaches the bottom. This has been demonstrated at the famous Red Jacket shaft of the Big Calumet and Hecla copper mine at Calumet. The article, no matter what shape or size it may be, is invariably found clinging to the east side of the shaft. One day a monkey wrench was dropped, but it did not get to the bottom. It was found lodged against the east side of the shaft several hundred feet down. This incident coming to the attention of the Michigan College of Mines, it was decided to make a careful test of the apparent phenomenon. It was decided best to use a small but heavy spherical body, and a marble, tied to a thread, was suspended about twelve feet below the mouth of the shaft. When the marble was absolutely still, assuring that it would drop straight, the thread was burned through by the flame of a candle. The marble fell, but at a point 500 feet from the surface brought up against the east wall of the shaft. The same would be the case were a man to fall into the shaft. While it would mean sure death, the body, badly torn, would be found lodged in the timbering on the east side. Members of the faculty of the College of Mines are now engaged in experiments with a view of developing data as to the thickness of the earth's crust. It is not hoped to solve the perplexing problem of the distribution of the earth's matter, but it is hoped to concerning it. To this end the Red Jacket shaft presents advantages possessed by no other place in the universe. The deep shafts in other parts of the country and in foreign lands generally begin at an altitude and end above or very little below the sea level, whereas at the Calumet mine the Red Jacket shaft starts in a comparatively low altitude and pierces the earth's crust deeper and further below the ocean level than any other in existence. It is hoped within a year to be able to give some intelligent information regarding the investigations.

Comments by BHS:

The misspellings of wrench (rench), wall (wal), perplexing (preplexing), and possessed (possesed) appear in the original. The sentence which ends "but it is hoped to concerning it" is copied as written though clearly a few words (at least) are missing.

While the date of the article is unknown, the MCM experiments were in 1901 and 1902. The last sentence suggests that the article is from about that same time. A very similar article appears in the Detroit Free Press, August 20, 1905, Part One, page 10. (See next page).

Only one of the steel balls ("marbles") was found, and it was 800 feet below the surface, not 500 feet.

The MCM experiments to study the earth's crust used small pendulums and did not involve falling objects. At one point McNair did suggest that a study of falling objects could be used to obtain similar information.

The deepest shafts at the time, and the shafts where the MCM faculty did their work, were the Tamarack shafts. These were near the "Red Jacket shaft," but they are not the same.

CRUST OF THE EARTH

Its Thickness Being Investigated at Calumet.

DEEP SHAFT PECULIARITY

Nothing Dropped From the Mouth of the Red Jacket Ever Reaches the bottom, but is Always Found Lodged Against the East Side – Revolution of the Earth the Cause.

BY PAUL LEAKE.

What was believed to be a fatal accident at the famous Red Jacket shaft of the Calumet & Hecla mine disclosed an interesting scientific fact, and that was, that nothing which falls from the mouth of the deepest shaft in the world ever reaches the bottom.

“This is due to the revolving of the earth,” said Prof. McNair, president of the Michigan College of Mines.” The article, no matter what shape or size it may be, is invariably found clinging to the east side of the shaft. One day a monkey wrench was dropped, but it did not get to the bottom. It was found lodged against the east side of the shaft several hundred feet down. We decided that to make a proper test it would be wise to have a small, heavy spherical body, so we suspended a marble tied with a thread about twelve feet below the mouth. We then burned the thread. The marble fell, but about 600 feet down brought up against the east side.”

“How is it when a man falls?”

“The same,” replied the professor. It means sure death to step into the open shaft, but the body, badly torn, will be found lodged against the east side. In a South African mine a car load of rock was dumped, but not a particle of it ever reach bottom.”

“Have you solved the problem of the depth to which it is safe to go in deep mining?”

“A mile has not solved it.” replied the professor with a smile. “The Red Jacket shaft is over that.”

“Is not this shaft of the Calumet & Hecla likely to develop some interesting data as to the thickness of the earth’s crust?”

“Yes, it is,” answered Mr. McNair earnestly. “We are conducting an investigation on that line now, and while we do not hope to solve the perplexing problems of the distribution of the earth’s matter, we do hope to add our quota to the information collected regarding it. We are particularly fortunate in being able to carry on our investigations here. It is the best place on earth for it. The Red Jacket is not only the deepest shaft in the world, but presents advantages for this investigation possessed by no other place in the universe. The deep shafts in the other parts of the country, and in other countries, begin at an altitude and end above, or but very little below the sea level, whereas here the shaft starts in at a comparatively low altitude, and pierces the earth’s crust deeper and further below the ocean level than any other in existence. We hope within a year to be able to give some intelligent information regarding our investigations.”

The professor is wrapped up in his work and takes great pride in the college of mines, which he justly holds is an institution of which the state should be proud.

From:
Detroit Free Press
20 August 1905
Part One, page 10.

(See comments above...)