

WHERE THE DIAMONDS COME FROM

FRANK CARPENTER VISITS THE GREAT PROPERTIES OF THE DE BEERS COMPANY WHICH PRODUCES \$25,000,000 WORTH OF GEMS A YEAR



KIMBERLEY is the world's greatest treasure vault. Stored away here in five mighty pipes of hard rock, going down no one knows how far into the earth, is a blue clay sprinkled with diamonds. Already more than \$500,000,000 worth of precious stones have been taken from them, and there are still hundreds of millions in sight. For many years the sales have amounted to from \$10,000,000 to \$10,000,000, and there are today lying out here in the open fields, still mixed with this clay, diamonds which would have set Aladdin crazy or made covetous the heart of Sinbad the Sailor.

The Diamond Capital.

These mines lie right close to Kimberley. They form a necklace around it, and that, one of the most valuable necklaces on earth. The necklaces is decorated anew every year with \$25,000,000 worth of brilliants, which are taken from these mines. They are allowed to blaze away for a few months under the African sun, and are then shipped off to dazzle the drawing-rooms of all parts of the globe.

A Birdseye View of the Mines.

All of the mines are within rifle shot of the center of Kimberley. If we climb to the top of the higher buildings we may see the skeletons of the washing machines on every side and between them the vast weathering floors where the precious earth containing the brilliants is allowed to lay and melt. Moving to them, from the mines, are great lines of what, in the distance, seem to be ants. They are marching in single file and are racing with one another as they pass to and fro. Now take your glass and you will see that each ant is a steel car filled with diamonds and earth, and that it is flying along under a wire cable from the mines to the fields. These fields are called floors. Every mine has its own floor, and in every direction you can see the cars moving. The black pygmies who are handling the cars are the natives, and the white ones on the outside are the guards to see that the black ants do not steal as they work.

Pipes of Diamonds.

Until these Kimberley mines were discovered, all the diamonds found were picked up out of gravel which lay on or near the surface of the earth. The Indian diamonds, among which were the Kohinoor, the Great Mogul, the Regent and the Orloff, came from alluvial washings composed of a mixture of broken sandstones, quartz, Jasper, flint and granite. The deposit was about 20 feet thick and was covered by a few feet of black cotton soil. It lay near the bed of a river in India, not far from Golconda, which was the chief city to which the diamonds were taken and sold. The diamonds of Brazil were first discovered in 1525. They were found in deposits of clay, quartz, pebbles and sand, buried under about 20 feet of other earth. They lay along the banks of rivers and in a few cases were imbedded in sandstone. It was the same with the diamonds of Borneo, of British Guiana, Australia and California, and also of those which were first discovered along the Vaal river near here in South Africa.



who traded it to this same Boer farmer for \$2000. The Boer sold it to a diamond merchant and it was sent to England and was eventually sold to the Countess of Dudley for \$100,000. These two are the best South Africa crazy. Diamond seekers came at once by the thousands, and the Vaal and Orange rivers were soon covered with mining camps. Men went about everywhere digging up the gravel and searching for stones. As the riverbeds became exhausted, the miners spread out over the country, and finally got here to Kimberley, which is 15 miles from the Vaal. One day a Boer discovered some diamonds in a clay bed out of which he was taking material to build a mud hut. He kept on digging, and the result was the Dutoitspan mine, which has proved one of the richest diamond pipes ever found. About the same time other claims were taken up and developed, and as a result came the five great mines which now form the basis of the De Beers syndicate.

The Kimberley Mine.

The Kimberley mine gives one an excellent idea of how the diamonds lie in these pipes in the earth. The pipe begins with a great tunnel which slopes down to the pipe proper, and the inside of which is about eight acres. The Kimberley mouth is, I judge, about 300 feet wide, and it slopes evenly down on all sides. The pipe itself is almost round. Its walls are of a black rock; they are almost as regularly shaped as though cut by a chisel, and they narrow only slightly as they go down for more than 200 feet. For that distance this area of eight acres was all composed of blue rock carrying diamonds, and the mine is producing millions of dollars worth of diamonds. The first earth was dug up with pick and shovel and washed in a rude way. The wires were run down into the mine and the blue ground was carried up by means of them. It is now elevated by great engines through shafts outside the mine itself, and a continuous line of steel cars rising all day long and the sun may be seen there that the diamonds can be taken out. The value per load is only a few dollars, but there must be at least six million dollars' worth of diamonds in the ground on the Kimberley floors.

Underground in the Dutoitspan.

It was in company with another American mining engineer that I explored the underground workings of the Dutoitspan, one of the largest diamond mines of the world. This was Mr. J. T. Fuller, a graduate of the Lehigh University. In fact, all of the mines here are managed by Americans. They were opened up and developed by Mr. Gardiner Williams, who is now a resident of Washington, and their present general manager is Mr. Apheus Williams, his son.

Blasting Out Diamonds.

Everywhere we went the natives were working. Here they were loading the blue rock upon cars, and there they were dumping it down through the wells to the reservoirs below. In one place they were blasting. The rock is of such a nature that compressed air cannot be used, and the men were cutting holes five feet deep by means of



LOADING DIAMOND-FERROUS EARTH IN THE DUTOITSPAN.

Monument, and the blue ground has been found peppered with diamonds throughout. From some of the upper levels much of the ground has been extracted, but mining is now going on at every level, the amount of earth taken out decreasing until at the bottom there are little more than the tracks used to carry the cars of blue clay to the shaft.

Scenes in the Mines.

It was in company with Mr. Fuller that I went through the Dutoitspan. The mines are dirty and the rock is so sharp that it cuts one's shoes. For this reason we wore stout boots of mile leather, such as are used by the miners, and were clad in miners' clothes.

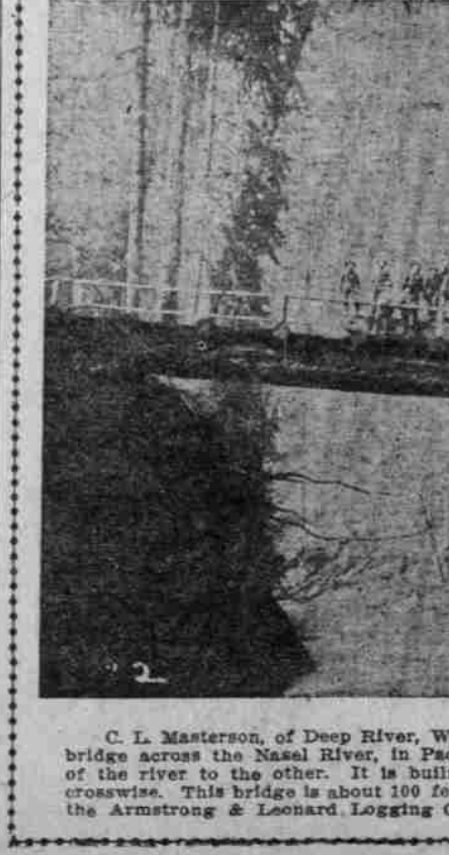
THE DE BEERS MINE FROM ABOVE

long chisels worked by hand. I cannot describe the terror inspired by these blasts as they go off down there 500 or 600 feet below ground. The boom is like that of a big naval gun, and it strikes the drum of your ear as though it would break it. The vibration blows out the candles, and the dynamite fills the tunnels with a sickening smoke. Thirty-six thousand blasts are shot off in that mine every week, and nevertheless the accidents are few. During the past year only two men have been killed, and this is a small mortality considering that there are 4000 native workmen and that the mines are usually operated both day and night. The amount of explosives used is enormous. In 1906 in all the mines of the De Beers Company there were consumed more than 3,000,000 pounds of dynamite, and to set this off were used more than 400 coils of fuse, each 24 inches long. The De Beers Company has its own dynamite factory not far from Cape Town. It finds it cheaper and safer to make its own explosive.

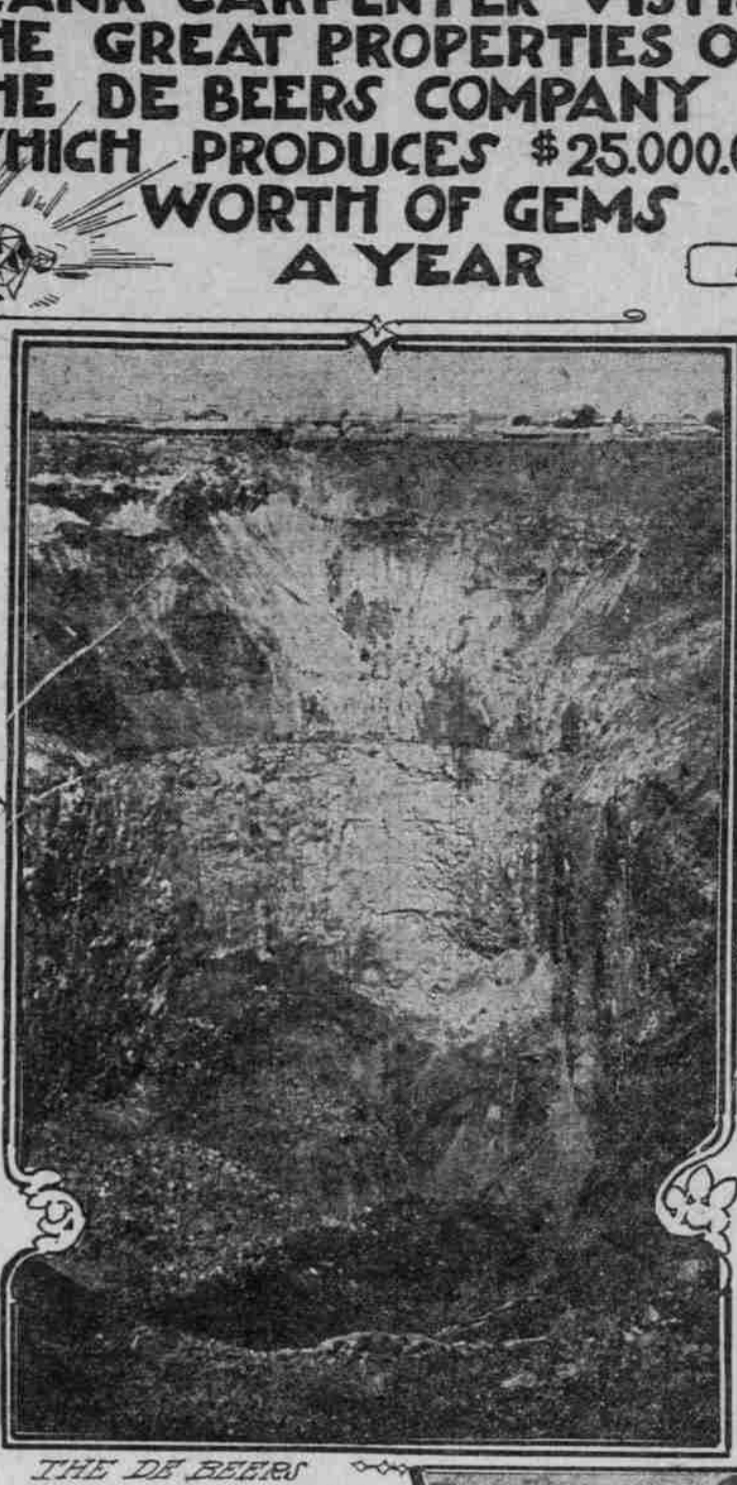
Bid Whist the Latest Card Game

Yankee Invention Intended to Eliminate Luck.

THE Fall seems to be the time for fresh crops of card games and the present year does not look as if it would be an exception. The years bring their own styles with them, and the prevailing fashion for this season is undoubtedly bidding. A card game which has no bidding in it is not up to date. They are playing nothing but auction bridge in Great Britain now.

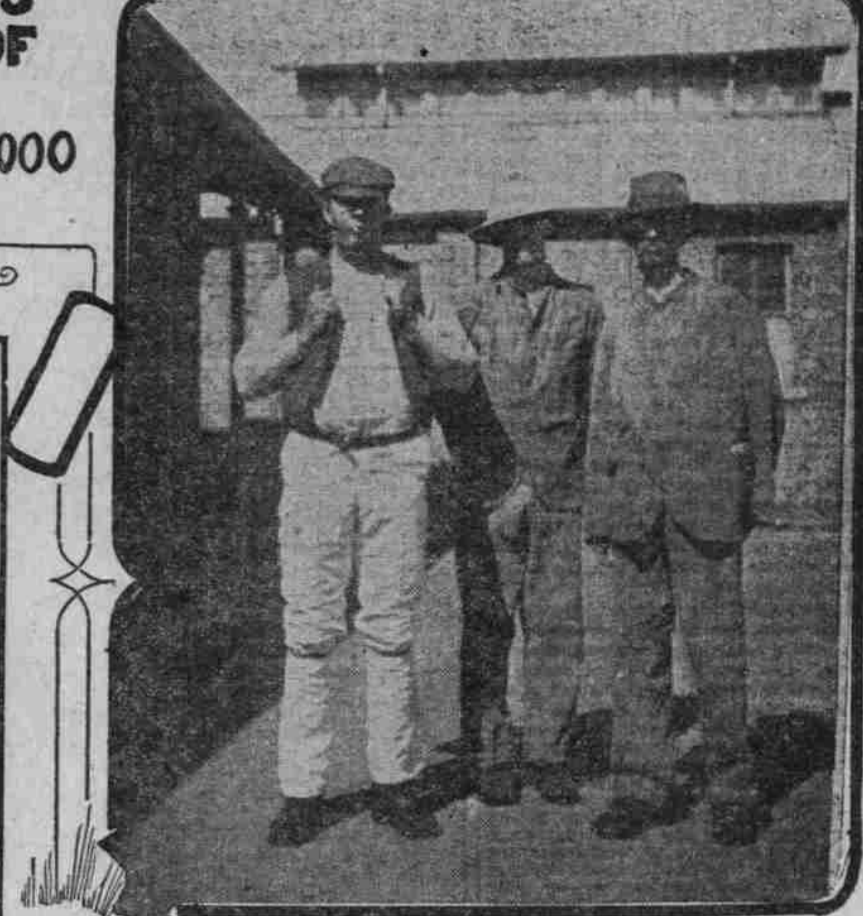


C. L. Masterson, of Deep River, Wash., sends to The Sunday Oregonian this photograph of a donkey bridge across the Nasel River, in Pacific County, Wash., which is used for taking the donkey from one side of the river to the other. It is built of logs, three of them forming the stringers, with short storks placed crosswise. This bridge is about 100 feet long. The donkey and bridge shown in the cut are the property of the Armstrong & Leonard Logging Company, of Deep River, Wash.

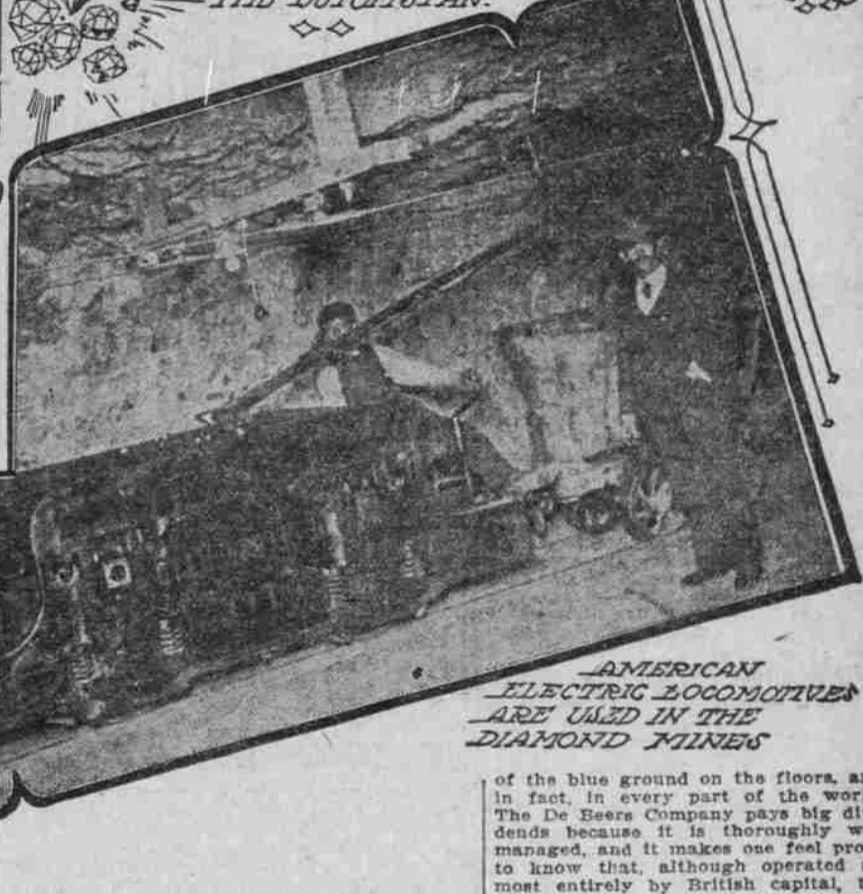


THE DE BEERS MINE FROM ABOVE

works I have been surprised at the care and economy everywhere shown. Although the company pays big dividends not a cent is allowed to go to waste, and the most careful watch is kept to avoid any extravagance. As we went through the Dutoitspan we passed a chamber where an electric light was burning, although the work had been stopped for the time. The man



AMERICANS AT KIMBERLEY. AT LEFT MR. ST. FULLER, MGR. OF THE DUTOITSPAN.



AMERICAN ELECTRIC LOCOMOTIVES ARE USED IN THE DIAMOND MINES

of the blue ground on the floors, and, in fact, in every part of the works. The De Beers Company pays big dividends because it is thoroughly well managed, and it makes one feel proud to know that, although operated almost entirely by British capital, the managers are Americans.

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Major-General Drayson, the English whist authority, figured out as the result of his examination of 20,000 rubbers that the finest whist player in the world had no greater advantage over the worst than about half a trick a rubber, with perfectly even luck. His point theory was that such of the poor players as were not lucky at the game quit the game, and the scientific player was always competing with the survival of the fittest in the world of lucky card holders. Sounds reasonable?

Reserved Her Verdict. Philadelphia Inquirer. A gentleman who was no longer young, and who never was handsome, said to a child in the presence of her parents: "Well, my dear, what do you think of me?" "The little girl made no reply, and the gentleman continued. "Well, you don't tell me. Why won't you?" "Two little fat hands tucked the corners of a platoon into her mouth, as she said archly, in a timid whisper: "Cause I don't want to get whipped."