BERLEY DIAMONDS FOR AMERICA

The United States Takes Three Fourths of the Precious Stones of South Africa

The United States Tokes Three Fourths of States Three Fourths of St BY FRANK G. CARPENTER.
His manager of all the great diamond mines lying about Kimberley is an American. His name is Alpheus Willams, and he is the son of Mr. Gardner F. Williams, who took charge of the mines at the time the De Beers Company was organized, and who managed them un til three years ago. During Gardner Williams' control the mines became the chief ource of the diamond supply of the world. He had charge of them for about 29 years, and in that time they produced almost \$200,000 000 worth of diamonds and paid out \$118,000,000 in dividends. Since his sex has been handling them they

of \$5,000,000 a year, and the prospect is that they will produce millions annually Manager of the De Beers Company.

have been yielding in the neighborhood

It is a big thing to be the manager of like this. It means the control of an army of wage workers greater than that which Xenophen led en his march to the sca, and equal to the standing army of the United States before our war with Spain. During the past two years Mr. Williams has hat on his payroll in the neighborhood of \$5.000 men. This number has been reduced since the American panic; but still it runs up close to 15.000 and it will be increased as the times improve. All of the men have to be fed, and the supplies which they consume cost millions. The five great diamond pipes, which are now being mined here, are operated with the most expensive machinery. They have vast works connected with their miles of cable cars, cover 11,000 acres, or over 17 square miles. Most of you can realize the size of a 160-acre farm. The diamond floors and washing works and mines of the De Beers Company here would cover just about 72 such farms, and every square yard of that area is humming with industry. Nearly every square of it yields more or less value; it has to have guards to watch it, and the greatest economy is required to keep the millions from leaking away. In the year 1966 the wages paid amounted to over \$10.000, 000 and the food necessaries of the native laborers almost \$1,500,000 more. Supplies for the men who have to be fed in walled compounds would tax the capacity of our largest department stores. They used last year almost \$6,000,000 lonves of bread and something like \$3,000,000 pounds of fresh ment. They drank 1,000,000 new shirts and \$5,000 pairs of trousers. The item for mining supplies are even larger. It took 700,000 pounds of candles to light the men at work in the tunnels and more than 1000 miles of stoel wire years to be in the tunnels and more than 1000 miles of stoel wire years. Then the timnels and more than 1000 miles of stoel wire years to be a few than 1000 miles of stoel wire years to be a few than 1000 miles of stoel wire years to be a few the tax and \$5.000 pounds of candles to light the men at work in the tunnels and more than 1000 miles of stoel wire years to be a few than 1000 miles of st greater than that which Xenophen led his murch to the sea, and equal to light the men at work in the tunnels and mere than 1900 miles of steel wire rope to hast the cars. The new tim-bers for the mines, which came from San Francisco, amounted to more than 18,000,000 feet board measure, and the iron and steel bars, brass castings and bolts and nuts ran high into hundreds

bells and nuts ran high into hundreds of thousands of pounds. In addition to the mines, the company has a number of other institutions in and about Kimberley. It has 300,000 gcres of land, a great farm for raising its horses and mules, an electric railroad, a hotel, and hospitals and clubs. It practically controls the town of Kimberley, which has a population of \$0.000, so that altogether the mine manager has little time to spars.

A Talk About Diamonds.

It was in the offices of the De Beers Company that I had a talk with the man who controls all the institutions. Mr. Alpheus Williams is not yet over 25 years of age. He was born in the United States, and educated at Cornell and the University of California before and the University of California betore he came out here some years ago to be his father's assistant. When the lat-ter retired in 1985 he was elected in his place and since then has been in charge of all the De Beers Company's charge of all the De Heers Company's properties here. During my talk with him the subject of the diamond demand came up, and he replied that it had been excellent until our great panic occurred. Up to that time the world was taking the whole of the Kimberley was taking the whole of the attheorety output, and the company had but comparatively few diamonds on hand. The people were everywhere prosperous, and they were buying diamonds as never before. This was especially so in the United States, which was taking In the United States, which was taking almost three-fourths of all the diamonds produced here. Then the panic came, and our demand dropped, Fortunately the De Beers Company had an enormous amount of blue ground on its floors, and it has been able to reduce its apparatus without any descent duce its expenses without any danger of being unable to supply the demand of the near future. Today the mines are running with a much decreased force, and they will be operated on a very conservative basis until the times

The American Market.

In talking with Mr. Williams about the American market, I asked him what kind of stones were purchased by us.

He replied:

"The very best. The finest and purest of our diamonds go to the United States, and within past years that country has been by far our best customer. For some time it took two-thirds of all the diamonds we mined, and during the past year or so it has bought even more. We send also many ordinary stones there. There is a great demand in our country for diamond engagement rings. In fact we are about the only people among whom every young man thinks be must give a diayoung man thinks he must give a dia-mond ring to his sweetheart to seal the promise of marriage. This is so much the custom that many prospective grooms are new buying such rings on the installment plan, and there is a regular business of selling them long time, at so much down and so much per month, until paid. Diamonds are also used largely as wedding presnts and as birthday gifts."

American Diamond Cutters.

"In what shape do the diamonds go to United States, Mr. Williams "

The most of them are first cut in Europe." was the reply. "We have a duty of 18 per cent on cut diamonds which is levied to protect the American diamond-cutting industry, but the fact that more than two-thirds of the importa-tions are in the shape of cut stones shows that the tariff is not high enough for that purpose. In 1806 the United States imported about \$34,930,000 worth of diamonds, and of these only \$10,-

stones be as beautifully shaped and polished at home as abroad?"

"Yes. Our diamond cutters are mainly from Holland and Belgium, and the most of them learned their trade before they of them learned their trade before they sent was ever \$,500,000 loads, and that produced diamonds which realized to such workmen in and about New about \$28,000,000. At the same rate of York, which is the center of the industry. This is a small number companies to the same rate of washing the blue on the floors and in 1738 this new company shipped furs in the trade in the produced diamonds which realized the came the center of the fur trade. In passing the blue on the floors and in 1738 this new company shipped furs in the produced diamonds which realized their trade before they produced diamonds which realized the country and founded that powerful to the country and founded that power

Antwerp and Amsterdam."

Sawing and Polishing Diamonds.

naterially changed of late years," continued Mr. Williams. "We have now diaond saws by which we can cut pieces from a diamond and make two or more diamonds out of one. Here, for instance, is the kind of saw which is most common-

At this point Mr. Williams handed me a At this point Mr. Williams handed me a copper disc about as thick as my thumb nail and as big around as the bottom of a teacup. The metal was comparatively soft, and I could not see how it could cut a diamond, which is harder than the fin-sunday Lead carpenter isyout.....est steel, until Mr. Williams said that the wheel was dipped in diamond dust and the dust did the cutting.

dust did the cutting.
"It is on this same principle that all "It is on this same principle that all diamonds are ground and polished," said Mr. Williams. "The only thing that will cut a diamond is a diamond itself, and all polishing must be done with diamond dust. In the cutting establishments this is done on flat wheels of soft iron as big as a dinner plate, which are so moved by machinery that they go around at the rate of 2000 revolutions a minute. These wheels are covered with a mixture of diamond dust and water, and the precious stones fastened into cement are pressed upon the wheel and ground off into the facets, which so increase their brilliancy. The splitting of diamonds is done by other fiamonds, which might be called diamond knives. The latter are fixed in cement, and are used to split the diamonds at the flaws which the stones frequently have. There are something like 10,000 men and women employed in the diamond cutting and pollshing industry of Amsterdam, and they handle gems worth many millions of dellars every year. The greater part of the De Beers output is cut in Europe, and the center of the industry is Amsterdam. It is said that more than \$8,000,000 is paid out in wages to the diamond workers of that city every year and that there are something like @ factories in which the cutting and polishing are done."

The Diamond Output Not Failing.

I asked Mr. Williams whether we would ever have a diamond famine, saying that I had heard that the mines were playing

"Any statement of that kind is not We have enough diamonds in sight to keep us busy for many years, and we shall probably be supplying most of the diamonds of the world for several generations to come. As it is now, we have something like ten million loads above the 500-foot level, and 000.000 worth were in the rough, while \$1,000.000 worth were cut stones. Rough diamonds are free of duty."

"But are the American diamond cutters equal to those of Europe? Can the stones be as heavitfully abared and and all follows the shaft is about 7,800,000 loads. All told, we have somewhere between \$0,000,000 and 70,000,000 loads of blue ground on our floors and in sight. The total amount washed and crushed last

TAMOND IN THE BISUE GROUND ..

creased as we have gone down, but they hold their own. At the Kimberley mine we are now working a half-mile below the grass roots, and the blue ground there is about as rich in dismonds as it was all the way down. In the De Beers we are down 2000 feet, and in the Kimberley and the De Beers they have been working almost stantly for 36 years, and it is believed that the mines have still a long life before them. The Wesselton, Bulfon-tein and Dutoltspan have altogether an area about 4½ times as large as the Kimberley and De Beers combined, and, although an enormous amount of dia-monds have been taken from them, there are still 50,000,000 loads of blue ground above the 500, 600 and 750-foot levels. There is no reason to think that the diamonds may not go as far down in these pipes as in the De Beers

Diamond Pipes.

"Tell me something about these dismond pipes. Do they occur anywhere

else in the world than here?"
"Yes. There are some others in South
Africs, a notable one being the Premier

pared with the thousands employed in any would produce considerably over \$200,200,000 worth of diamonds."

Sawing and Polishing Diamonds.

"Have you yet reached a point in any

"The business of diamond cutting has played out?" I asked.

"No. The number and value of the stones in the various pipes have not inand the Kimberley, and the prospect is that there will be no diamond famine for many, many years to come

ROCK DRILLING IN THE DE BEERS MINE

Russian establishments in North Amer-

ica at an annual rent of £40,000, so

THE BE BEERS COMPANYS

OFFICES AT HIMBERLEY.

takes to get out the diamonds. In the Dutoitspan we have to handle four tons of earth to every carat, and it is about as bad in Kimberley. Now, when you remember that a diamond weighing a carat is not as big as a pea, and that it has to be found and taken out of this great mass of earth and rock, you will see how difficult the problem is. In the see how difficult the problem is. In the first place, we have to blast down the blue ground. We then carry it to the surface and allow it to be out in the open for one year to soften it. After that it rium be washed and crushed and handled again and again to find the stones. All this means an enormous amount of labor as well as expensive machinery, which must be carefully operated."

cost of production vary in different mines, but altogether they pay well."

After the diamonds have been mined and cleaned they are sold to the di-amond syndicate, I visited the offices of this organization in the De Beers Company building and took a look at the steel vaults in which the brilliants the steel vaults in which the brilliants are kept until shipped to London. They are sent there by mail, and usually in registered packages. They go on mail cars to Cape Town and from there to Southampton on the big steamships of the Union Castle line. The trains which carry them over the 600 or 700 miles of track from here to the Cape of Good Hope are equipped with safes, which have been especially built for the purpose. The steel floors of the safe are as I understand it, a part of the floor

are found in a sort of springy sandstone." "Are the pipes regular in shape?" "No; they vary as they go downward. The Kimberley mine at the top is shaped diamond mine, near Pretoria. There are stone." stone." stone. "Are the pipes regular in shape?" "No; they vary as they go downward. The Kimberley mine at the top is shaped like a pear. At a depth of a few hundred feet it becomes somewhat like in the diamonds." "The mining of the world." continued Mr. Williams. "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of the world." continued Mr. Williams. "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run, all though their direction is comparatively straight." "The mining of them is a low-grade and in others they contract, so that we cannot tell just how they will run. all though their direction is comparatively straight." Has Outlived Rivals for 240 Years Famous Hudson's Bay Company That Started With a Capital of \$42,000.

when a license to trade in furs in Hudson (now Hudson) Bay was granted to a company which included several men of high rank. The Duke of York, the but one meaning, the Hudson's Bay

Shaftesbury were among them. The capital was £8423, not a great amount with which to fight the rival companies and the intrepid individual agents, chiefly French, whose competition was hard on the new enterprise. But the conquest of Canada helped it a good deal. English traders learned the profits in spite of the competition of ways of the Indians and their system of the exchange of goods.

Toward 1684 some merchants of Montreal combined to explore the fur country and founded that powerful Northwest Company, which soon became the center of the fur trade. In 1738 this new company shipped furs.

HE history of the famous Hudson's and the existence of the Hudson's Bay gamating the Hudson's Bay and North-Bay Company dates from 1679. Company was again threatened. west companies under the title the Company was again threatened.

In "Conjuror's House" Stewart Edward White has given us glimpses of ent it has only one rival of importthe picturesquely highhanded methods of "the company"—which nowadays has but one meaning the Hudson's Bay

The Hudson's Bay Company has posts

scattered over a domain covering 3,-700,000 square miles. Its principal es-tablishments are on James Bay and toward the frontiers of upper Canada, Duke of Albemarle and the Earl of Company. But according to a writer in Fur News, its early rival was no bet-"It shrank from no act, however inon lakes Athabasca, Winnipeg, Methye and near the Columbia, Mackenzie. iquitous," says the account. "Its agents Saskatchewan and Assimiboine Rivers. Fort York, commanding the course of the River Nelson, is the headquarters imposed on their own employes and speculated on the misery of the Indians, consequently realizing immense of the company and contains its principal depot. In 1842 it took a lease of all the

new Russian and American companthat it is now working on its own ac-count the vast tracts of country be-tween the Mississippi and the Pacific

The following is a list of the quanti-

ngins and young beavers
Mushrats 6
Badgers 6
Bears 7
Erminss Foxes Lynzes
Sables Polecats
Otters Raccours

Such figures ought to bring in a large profit to the Hudson's Bay Company, but unfortunately they have not been maintained, and for the last 20 years have been decreasing.

Until 1839 the company, was in a

flourishing condition. In that year the number of furs exported was 2,250,003, but since then the trade has gradually declined, and this number is now re

duced by one-half at least.

The following table, taken from the
"Voyage of Captain Robert Lade."
shows on what terms exchanges were formerly made with the Indians. Beaver skins were then the currency employed in buying and selling. The Indians in buying and selling.

A "Peacherine." (A California fruit specialist has invented a fruit that is even finer than the peach. It is called the peacherine;
When Betty hade me write her verses lately (She knew that I was hashful in my When Betty hade me was hashful in my (She knew that I was hashful in my (speech).

I found the sufast—if not the most stately—Metaphor for a hance was a "Peach."
But fashlons change, and now, it seems, a rare
Fruit's been hit on; whence I rather ween
That—in addressing these few lines to
Clara—
I'd better say she is a "Peacherine."
—The Bystandar,



must be carefully operated."
"Yes, but it pays," said I.
"It does pay. The value of the De
Beers mine per load is about 24 shillings, or \$6. It costs us \$2 to get out

diamonds, so that we have a profit the diamonds, so that we have a profit there of something like \$4 per load. In the other mines the profit varies, and all told about half or more of the values are eaten up by the cost of op-erating the mines and getting out the diamonds. A load weighs in the neigh-borhood of three-quarters of a ton. The values of the blue ground and the

pose. The steel floors of the safe are as I understand it, a part of the floor of the car.

Not long ago a would-be diamond thief got the idea that if he could cut out this steel plate a million dollars' worth or more of diamonds would drop into his hand. He prepared for his work by crawling under the car before it started. He had a board under him and lay there on his back during the first part of the journey, while he drilled 49 different holes up through the safe. He had the floor plate just about safe. He had the floor plate just about loose, and was sawing with a steel saw from one hole to another when something made him think he was discov-

thing made him think he was discovered and he dropped out and ran. The alarm was a faise one, and he might easily have got the diamonds had not his nerve failed him.

That attempt was made many years ago, and since then the safes have been so improved and fortified that it would be impossible to cut through them. It would seem, however, that they might easily be held up by train robbers and that a little dynamite or nitroglycerin would suffice to lay their contents have to thieves. It is very sure that such enormous values in diamonds could not be regularly carried over the western parts of the United States without great acale. In-parts of the United States without great ch work it danger.

But a few years ago beaver skins became so scarce that the currency had to be changed. Blson furs are now

the medium of trade. When an Indian presents himself at the fort the agents

he exchanges these pieces of wood for manufactured articles on the premises, and as the company fixes the price of the articles it buys and sells it cannot fall to realise.

fall to realize large profits