

THE DIAMOND MINES OF SOUTH AFRICA.

The most famous diamond mines in the world are Kimberley, De Beers, Dutoitspan, Bultfontein and Wesselton. Kimberley is practically in the centre of the present diamond-producing area. The five diamond mines are all contained in a precious circle three and one half miles in diameter. They are irregular-shaped round or oval pipes, extending vertically downward to unknown depths, and becoming narrower as the depth increases. They are considered to be volcanic necks filled from below with a heterogeneous mixture of fragments of surrounding rocks, and of older rocks, such as granite, mingled and cemented with a bluish-colored hard mass, in which famous "blue ground" the imbedded diamonds are hidden.

How the great pipes were originally formed it is hard to say. They were certainly not burst through in the ordinary manner of volcanic eruption, since the surrounding and enclosing walls show no signs of igneous action, and are not shattered or broken up even when touching the "blue ground." It is pretty certain that these pipes were filled from below after they were pierced, and the diamonds were formed at some previous time and mixed with a mud volcano, together with all kinds of debris eroded from the rocks through which it erupted, forming a geological "plum pudding." A more wildly heterogeneous mixture can hardly be found anywhere else on this globe.

It may be that each volcanic pipe is the vent for its own laboratory—a laboratory buried at vastly greater depths than we have yet reached—where the temperature is comparable with that of the electric furnace, where the pressure is fiercer than in our puny laboratories and the melting-point higher, where no oxygen is present, and where masses of liquid carbon have taken centuries, perhaps thousands of years, to cool to the solidifying point.

In 1903 the Kimberley mine had reached a depth of 2,599 feet. Tunnels are driven from the various shafts at different levels, about 120 feet apart, to cross the mine from west to east. These tunnels are connected by two other tunnels running north and south. The scene below ground in the labyrinth of galleries is bewildering in its complexity, and very unlike the popular notion of a diamond mine. All below is dirt, mud, grime; half-naked men, dark as mahogany, lithe as athletes, dripping with perspiration, are seen in every direction, hammering, picking, shoveling, wheeling the trucks to and fro, keeping up a weird chant which rises in force and rhythm when a greater task calls for excessive muscular strain. The whole scene is more suggestive of a coal mine than of a diamond mine, and all this mighty organization—this strenuous expenditure of energy, this costly machinery, this ceaseless toil of skilled and black labor—goes on day and night, just to win a few stones wherewith to deck my lady's finger! All to gratify the vanity of woman! "And," I hear my fair reader remark, "the depravity of man!"

Prodigious diamonds are not so uncommon as is generally supposed. Diamonds weighing over an ounce (161.5 carats) are not unfrequent at Kimberley. I have seen in one parcel of stones eight perfect ounce crystals, and one inestimable stone weighing two ounces. The largest known diamond, the "Cullinan," was found in the New Premier Mine. It weighs no less than 3,025 carats, or 1.37 pounds avoirdupois. It is a fragment, probably less than

half, of a distorted octahedral crystal. The other portions still await discovery by some fortunate miner.

At the close of the year 1904, ten tons of diamonds had come from these mines, valued at \$300,000,000. This mass of blazing gems could be accommodated in a box five feet square and six feet high. The diamond has a peculiar luster, and on the sorter's table it is impossible to mistake it for any other stone. It looks somewhat like clear gum arabic. From the sorting room the stones are taken to the Diamond Office to be cleaned in acids and sorted into classes by the valuers, according to color and purity. It is a sight for Aladdin to behold the sorters at work. In the Kimberley treasure store the tables are literally heaped with stones won from the rough blue ground—stones of all sizes, purified, flashing and of inestimable price; stones coveted by men and women all the world over.

Where fabulous riches are concentrated into so small a bulk, it is not surprising that precautions against robbery are elaborate. The illicit Diamond-Buying laws are very stringent; and the searching, rendered easy by the "compounding" of the natives, is of the most drastic character. The value of stolen diamonds at one time reached \$5,000,000 a year. Now the safeguard against this is the "compounding," a large square enclosure of twenty acres surrounded by rows of one-story buildings divided into rooms holding about twenty natives each. Within the enclosure is a store where the necessities of life are supplied at a reduced price and wood and water free. In the middle is a large swimming bath with fresh water running through it. The rest of the space is devoted to games, dances, concerts and any other amusement the native mind can desire. In the compound are seen representatives of nearly all the picked types of African tribes.

—Sir W. S. Crookes, in N. A. Review.

TAME ANIMALS I HAVE KNOWN.

By Nixon Waterman.

A thick-fleeced lamb came trotting by, "Pray, whither now, my lamb?" quoth I. "To have," said he, with n'er a stop, "My wool clipped at the baa baa shop."

I asked the dog: "Why all this din?" Said he: "I'm fashioned outside in, And all my days and night I've tried My best to get the bark outside."

A hen was cackling loud and long, Said I to her: "How strange your song!" Said she: "'Tis scarce a song; in fact, It's just a lay, to be eeg-act."

I asked the cat: "Pray tell me why You love to sing?" She blinked her eye. "My purr-puss, sir, as you can see, Is to a mew myself," said she.

I asked the cow: "Why don't you kick The man who whips you with the stick?"

"Alas! I must be lashed," said she, "So I can give whipped cream, you see!"

—Christian Advocate.

To the prophets visions came and went; they saw the light and the splendor of them, and then that faded and the shadow was left. But for you and me there shall be no fading; for us the light shall be enduring, the sources of strength shall be unfailing, when the Master walks with us, and we with Him. If we are in constant communion with Christ, the strength of God shall be ours; there shall be no battle that does not end in victory; no darkness that His light does not dispel; no hope unto which we shall not some day attain.—G. Glen Atkins.

THE MISTAKE OF THE CLEVER WOMAN.

Clever women are so accustomed to being told that men are stupid animals, fitted only to be treated like children, that it is sometimes great fun to see how often the common or garden variety of man can surprise these clever women by exhibiting almost human intelligence when it comes to choosing a wife, and jolting the clever woman clear out of her bearings by marrying some plain little brown wren of a girl whom the clever woman had completely overlooked as a possible rival. Men would be more successful in their marriages if women were not such graceful and attractive hypocrites. Yet it is a curious thing that the quality which often wins a man in spite of himself is that quality which the man-hunting woman oftentimes fails to simulate—and that is the simple, sympathetic, old-fashioned attribute of consideration for other people—consideration for the tastes, prejudices, antipathies, feelings and infirmities of parents, of old people, of shy children, of the sick, of the religious.

A WORKER OF GHENT.

By William Rittenhouse.

In the old Flemish city of Ghent, just across from the massive walls of what used to be the convent of the Chartreux, stands one of the most interesting statues of the world, to my mind, for it is one of the very few statues any city has ever put up to a working man—Lievin Bauwens.

When I first saw Lievin Bauwens there, on his pedestal, I thought he was some hero-patriot of French Revolutionary times. Young, slim, eager, the statue looked the part. But Lievin Bauwens was just a worker of Ghent—a weaver of cloth, busy at his weaving when Marie Antoinette was beheaded, and Napoleon was rising to greatness. Through all that troubled time, the young Flemish weaver was pursuing, with eager courage, a guarded secret, to surprise which might mean death.

Ghent had always been a city of spinners and weavers, since its beginning far back in the centuries. From it Edward the Third, whose Queen Philippa was a Fleming, had sent weavers to England to teach his subjects how to weave woolen cloth. Ghent had forty thousand looms even then, in mediaeval days.

But in Lievin Bauwens' day, England, in her turn, had a knowledge of weaving that Ghent needed; and unlike Ghent, England was not willing to teach her secrets of weaving. The hand loom, in Great Britain, was, in fact, passing away before the new methods in which machinery was used. The spinning jenny and the "mule" had been revolutionizing things. Unless Ghent gained this new knowledge, her looms must stop.

So Lievin Bauwens went over to England, and in the first year of the nineteenth century he was back again in Ghent, where the Revolution had driven the monks out of the big convent of the Chartreux, leaving it empty. Here the brave worker, armed with the secrets of spinning, set up the first spinning mill on the Continent of Europe in 1801 and brought with him hope and prosperity to the weavers of Ghent. That is why the city has not forgotten him, and why his statue stands there, outside the massive old convent, with his hand on the yard of cloth that meant so much to Ghent, the weavers' city.

There are heroes and heroes. The work of peace, the daily drudgery of a busy trade, has its place for them, as well as the battlefield. The worker does not always recognize this, nor rise to the inspiration. Lievin Bauwens did. He was a true patriot and a brave citizen—and therefore, I repeat, his statue is one of the most interesting in the world, though his hand holds neither flag nor sword, and his name is almost unknown outside of Ghent.—British Workman.