

A QUARRY OF VERDE.

ON ISLAND OF CATALINA, OFF CALIFORNIA.

Was Used by the Indians—Made Household Utensils from It and Bartered Them for Game and Skins—Sawing Plant Established.

(Special Letter.)

The question whether we are advancing in the mechanical arts and great schemes of engineering is often suggested when we are confronted with the work of the ancients. The pyramids are the most stupendous works of man ever contemplated, and there appears to be nothing new under the sun. Interest in irrigation in the southwest dawned within the last twenty years, yet in Arizona and New Mexico there are traces of a civilization so old that the mind falters in following it back. We see beds of streams cut through miles of country, even mountain ranges, and a maze of irrigation streams crossing and recrossing the land, made unknown ages in the past years, so perfect from an engineering standpoint that the experts of today are emptying them of the sand and debris of centuries and using them as the arteries that shall bring new life to this fertile part of

quartz knives to work with. With these rude implements they carved out an object the shape of a cannon ball and as large as a football. Gradually this was picked away until finally it hung by a narrow stem, which was broken off. The inside was then slowly dug out with the same rude tools and in time the olla acquired the smooth and often artistic form so familiar in all the museum collections. The common shape is round, but fine mortar shapes three feet in height were not unusual.

The writer some weeks ago went over this old manufactory very carefully and found it most interesting. Here was an aboriginal manufactory—an outdoor workshop—in the immediate vicinity of which were found verde antique implements in various stages from the olla just outlined to the one that had been broken off, leaving the scars in the rock. In a word, the complete evolution of the olla could be traced here, especially at the head of Cottonwood canyon, back of Pott's valley, where verde antique crops out in ledges in every direction. On many of these can be seen the work of the native carvers, while beneath are the piles and heaps of chips as they were left centuries ago.

The early Spanish navigators, Cabrillo and Viscaino, who discovered the island 300 years ago, described the fine canoes of the natives. These,



SERPENTINE QUARRY AND WELL.

what was the old American desert. Everywhere we follow in the steps of the ancients, and on the island of Santa Catalina there is an interesting illustration of this.

When the whites first visited southern California they found in use among all the mainland Indians richly shaped ollas or mortars of steatite or serpentine, while scores of articles were formed of finer grades of the same, which experts have pronounced verde antique. In almost every grave ollas were found, and hundreds had been handed down and were in the possession of the Mexican descendants, of the Indians. There were flat stones, perforated to hang on pegs, quaint ornaments, sculpturings of various animals and tally stones with lines cut in them. One found by the writer at Santa Cruz island on the breast of a skeleton bore fifty or more straight marks—which might have been the man's age—and were all that could be made out.

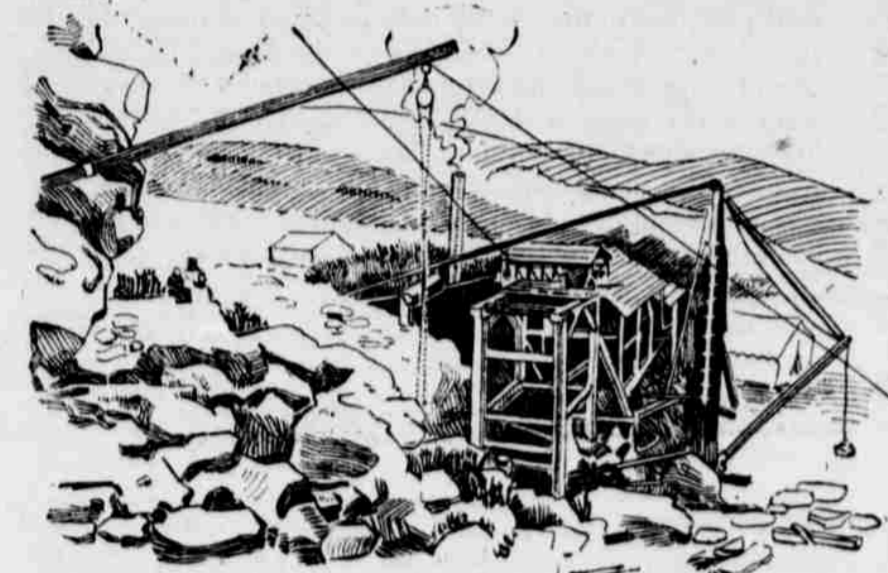
Verde antique was valuable, and a search was made for the point of supply. Finally Prof. Schumacher of the Smithsonian discovered it on Santa Catalina island, which lies off southern California, in a locality named Pott's valley, about fifteen miles from the little town of Avalon.

Prof. Schumacher found on this island a perfect treasure house and carried to the national museum hundreds of objects representing the ancient California islanders. All the islands of this group were inhabited by a hardy

laden with ollas, crossed the Santa Catalina channel, and the natives exchanged them for game and skins not found here. The present owners of the island, recognizing the value of the stone for commercial purposes, have followed out the mute suggestion of the ancients by establishing at Empire Landing a sawing plant, opening up a valuable quarry and one that is unique, it is believed, having no prototype at least in this country. The verde antique resembles soapstone in the crude rock and would easily escape observation.

It is of different degrees of hardness, and while so soft that it can be readily worked, it has great tensile strength, its chief value being in the remarkable manner in which it can be worked. Almost every possible object can be made from it from a boat to a screw. A great value lies in its lamination when polished of the darker grades of marble; and owing to its cheapness and durability it is in demand among architects for mantels, lining, electrical slabs and where a perfectly polished surface is required with the strength of marble. The new city hall of Los Angeles and many of the fine buildings in that city and San Francisco are finished in it, the stone taking a rich polish, abounding in greens and yellows, grays and black.

A visit to this quarry is most interesting. Here, 800 or 900 feet above the sea, is an elaborate plant and a series of saws that are capable of cutting out hundreds of feet of verde an-



ROUND SCARS INDICATE PLACES FROM WHICH OLLAS WERE BROKEN BY THE INDIANS.

race that had camps in every canyon where there was water, and Santa Catalina abounds in kitchen middens and places where these people lived. That they were a commercial race is shown by the ollas made by them, and they were the merchants who supplied the races of southern California with their pots and mortars or ollas.

Prof. Schumacher's attention was attracted at Pott's valley by the remarkable rock where the scars of ollas that have been broken off by the islanders are plainly seen. The rock is a lofty mass of steatite that rises in the center of Pott's valley, now called Empire Landing. It is a landmark from a long distance at sea and is overgrown with cactus and various kinds of vegetation; indeed, the cactus hides a large portion of it—an almost impenetrable chevaux de frise. The scars are circular and are the marks where the round ollas were broken off. The method of work was very primitive, the natives having only slate and

lique a week. The rock is first bored into with a steam rock drill, a modern improvement on the flint chips of the ancient owners of the soil. A series of borings make it an easy matter to break off the slab, which is then lowered by a huge crane upon a car, under the saws and blocked for cutting. The saw is a gang saw with a blunt surface and, worked by a steam engine, moves back and forth on the edge of the stone, not touching it but cutting by the grinding into it of a mass of steel shot, which are really the teeth of the saw. The rapidity with which this is accomplished is marvelous and large slabs are cut with ease.

Death-Dealing Instruments.

Soapless Sam—I see dey's been anudder drowned in a bathtub, Petey, Perambulating Pete—Yep; say, dem tings is as dangerous as trolleys.—Philadelphia North American.

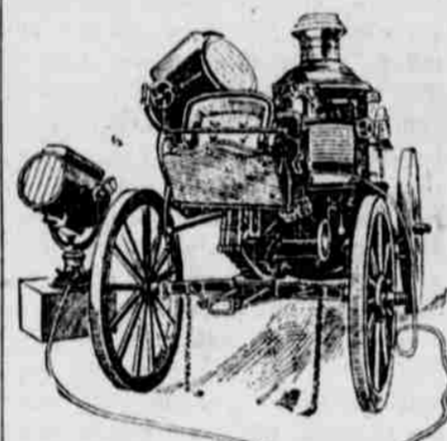
FIGHT THE FIRE.

SEARCHLIGHT ON FIRE ENGINE IN NEW YORK CITY.

To Aid the Firemen in Lighting Up Dark Places in Tall Buildings That Are Afire—It Is a Success—Are Self-Regulating.

(New York Letter.)

Fire Chief Croker expresses himself as being greatly pleased with the searchlight of the La France engine, an exhibition test of which was given the other night in New York. Many other officials of the fire department who were present also spoke highly of the searchlight. Superintendent Louis Divien of the La France company worked the searchlights. There were two of them attached to the engine. Each of them was about eighteen inches in diameter. They were detachable and were worked both on and off the engine. A small insulated wire cable was fastened to each light. In front of the engine house stands a twelve-story building, and one of the searchlights was turned upon its upper stories. The light illumined a circular space about thirty feet in diameter. The light shot far above the building, showing that it can easily be sent to the top of any skyscraper in the city. When thrown horizontally up Mercer street the searchlight illumined the fronts of buildings a half-dozen blocks away. The light penetrated the smoke from the engine easily. Of course, this smoke was not so dense as that which will be encountered at many fires. The new engine has a frame and running gear much like those of the ordinary fire engine. The boiler is a combination of nest tubes and snake flues. On the frames in front of the boiler is mounted a Forbes engine, light and compact. Directly connected to the engine is a marine type multipolar generator, supplying sixty-five amperes of current at a pressure of eighty volts. This generator is entirely inclosed, making it impossible for rain or fire streams to reach the armature. On each side of the driver's seat is placed an 18-inch projector, and the seat folds over so that the projectors can swing through a circle. They can also be placed at any vertical angle. The projectors are supplied with deflecting glass fronts, making it possible to cover a large area with the light at short range, or by using the plain glass fronts, also supplied, the light may be thrown out



in parallel rays to a great distance. The lamps are self-regulating, consume thirty-five amperes of current each, and each gives an arc of 6,000 candle power. Between the projecting bases and under the driver's seat, in a nickel-plated brass box, are two wire rheostats for regulating the currents in the lamps. Each lamp is supplied with an ampere meter. The dynamo is also supplied with a fireproof field rheostat and a volt meter.

WISHED HIMSELF POOR.

The Marquis of Winchester Envied Plain John Smith.

The marquis of Winchester, whose name figures in the list of Transvaal victims, was exceedingly popular with his soldiers, writes a London correspondent. There was one duty, however, in connection with the Household brigade which he positively detested, and many stories are told of the marquis' stubborn protests against going on bank guard. The staff quarters assigned the officers in Threadneedle street were close and stuffy, and the marquis invariably left them with a violent headache. Once when going off duty he said to the sergeant: "This job always makes me wish such a commodity as filthy lucre had never been invented. Then there would be no bank guard." "But my dear lord," came the reply, "you wouldn't have had an income of so many thousand a year. That might not have been very pleasant, either."

"Oh, sergeant," rejoined the marquis, with a smile, "it is not the first time in my life that I have wished I had been born plain John Smith, without a sixpence in my pocket unless I had earned it."

Simpson's Socks of Silk.

When the clever Kansas congressman, Jerry Simpson, made his first appearance in the house there was much curiosity as to his appearance, for he had been heralded throughout the country as "Socksless Jerry." A New York member on being introduced to the Kansan, audaciously stooped and drew up the leg of his trousers. He saw black silk socks with a drop stitch. "Well, I'll be hanged!" exclaimed the New York man, "how the world is given to lying."

An Injudicious Post.

Nell—Mad at him! Why, he wrote a lovely poem to her. Belle—Yes, but she never read it. When she saw the title of it she tore the whole thing up in a fit of anger. You see he called it Lines on Mabel's Face.

JULIA MORRISON JAMES.

Julia Morrison James is for the present probably one of the best advertised actresses in the country, owing to her acquittal at Chattanooga, Tenn., on the charge of murder. She shot and killed Frank Lelden, a member of the company. The shooting took place on the stage before a large audience, and produced a great sensation. As developed at the trial, Mrs. James seems to have been made desperate by the insults and advances of Lelden, and while her feelings were thus worked upon she did the killing. The jury took the view of her counsel, that at the time of the shooting Mrs. James was suffering from emotional insanity. The verdict gives general satisfaction. Julia Morrison James is well known in the theatrical world, and her friends and acquaintances in and near New York city all testify to her former good character and her pleasant and agreeable disposition. During her cross-examination she stated that she had no money with which to hire lawyers, but that her husband had money. Her husband has accompanied her on her professional tours since their marriage, and was in the city of Chattanooga at the time of the shooting. Mrs. James concealed



Leiden's actions from her husband as far as possible, lest he might kill her annoy, but the evidence seems to show that the two men were enemies.

WANTS A DECENT BURIAL.

One of the Great Anxieties of the Head of a Chinese Household.

A sympathetic foreigner, recently writing to an American newspaper, bewailed the heartlessness of Chinese sons and daughters who in the parent's lifetime prepare his coffin and shroud and openly talk with him of his demise. The facts do not justify the sympathy, for there can be no truer evidence of filial piety in China than for a child to present to his parent a burial outfit. Let the head of the family be assured by the indisputable evidence of the coffin in the house that a respectable burial will be his, and one of the greatest anxieties of his life is relieved. The coffin is proudly displayed to each guest, the latter never failing to add his testimony to the filial piety of the younger generation. The force of the Irish bull that "hopes you may live to eat the hen that scratches on your grave" is quite lost in China. It is singular to note with what certainty a Chinaman who is old or ill will prepare for his demise. Promotions of coming fate seem to enter into his soul, and he sends word to his relatives and friends that he is about to die—what day can they come to his funeral? If he has not been beforehand enough to secure his burial outfit there is a great commotion among the households till money is collected for the coffin and also for feasting and music, for a funeral is a great social event.

A MATHEMATICAL PRODIGY.

Arthur Griffith, the mathematical prodigy of Kosciusko county, Ind., who



ARTHUR GRIFFITH.

astounded the members of the American Psychological association at Yale recently with his incredible miracles of calculation, is only 19 years old. He was raised on an Indiana farm, and his first manifestations of intelligence were in the way of notation. By the time he could talk young Griffith could count up to 1,500. He counted the "buzzes" of a planing mill saw up to 6,573 in one day, and the grains of corn he fed to the chickens up to 42,173. The lad did not go to school until he was 10 years old, and then he looked at all his studies with a mathematical eye. Geography he reduced to a matter of miles and feet, and history to questions of days, hours and minutes. His remarkable faculty for numbers attracted the attention of Profs. Lindley and Bryan of the Indiana State university, and it was through these gentlemen that he was introduced to the American psychologists at Yale.

There is no man whose heart is so hard but the love of God can break it.

FIGHT TO THE DEATH.

DESPERATE BATTLE BETWEEN TWO HUGE GORILLAS.

In the Heart of Africa for the Possession of a Mate—The Thrilling Scene Described by an American Traveler.

(Special Letter.)

An American traveler, Capt. Jack Benton, who has spent some time in Africa collecting animals for menageries, once witnessed a fight between two gorillas in the wilds of upper Guinea that for ferocity has seldom been equaled. One day while out in the woods he came to a clearing, on the edge of which he saw a big male gorilla. On the other side of the open space was a female, and the former was evidently making court to her. The male gorilla, trying to attract the attention of the female by uncouth motions, was beginning to advance clumsily towards her, when suddenly a dull "boom, boom" sounded from far away in the forest. Up to that instant the male gorilla, while savage looking, had given no sign of being angry, but now all was changed. His huge jaws shut together with a snap. Then through the silence which had fallen on the jungle when the first sudden challenge was heard came a sharp bark, followed by a deep humming sound. It was the terrible battle call of a full-grown gorilla, the cry sent out when he is about to fight to the death for a mate. Suddenly there was a little flurry at the left end of the clearing, and the challenger broke through the bushes into plain sight. He was worthy to do battle with the first giant. I could see he was a veteran, with the scars of many battles on him. His big lips were rolled up in a grim snarl, showing broken teeth and great gaps, the result of former battles. Both gorilla-

laws of the old gorilla tearing out flesh and sinews as they were shoved away, but not un-gripped. Then the old fighter's right arm slowly and reluctantly uncoiled from the other's neck. The younger gorilla had broken the death grip. Both big fighters were momentarily free and stepped back to regain breath and repair injuries. Although wounded, it was the younger gorilla that made the attack. This time he did not waste any efforts on blows with his huge paws. When they had approached almost within striking distance the younger of the fighters made a rush. He received a blow on the head that would have crushed a man's skull. It scarcely staggered him. Then both his long arms wrapped themselves about his opponent's neck, and, holding his antagonist tightly clasped, he began biting with fierce energy, not a steady grip-biting bite, but furious, tearing gnashings, which ripped skin and flesh from face and shoulders and chest. The older gorilla was taken by surprise at this sudden rush and change of tactics by his opponent. But though at a disadvantage, he was too old a fighter to be easily dismayed. First, he secured a grip on his opponent's throat, and straining every muscle, tried to tear himself free from the infuriated grasp of the younger beast. He might as easily have broken a steel cable as the strangling hold of his enraged opponent. Then the older fighter relaxed his grip on the other's throat, and placing both his human-like paws on the younger's face, tried to force his head back. This brought out a terrible trial of strength. If the old gorilla could force the other's head back, he would be free and might perhaps break his enemy's neck. Each of the huge fighters seemed to show this and put forth all of their giant strength. Back, shoulders, arms and neck were called into play, the heavy muscles rippling up and gathering into big knots. For what was probably half a min-



A FIGHT TO THE DEATH.

utes were taller than the average man as they stood on their hind feet for battle, but their enormous breadth of chest and shoulders made them look like squatting, hairy giants. Neither of the big animals wasted time in preliminaries; they had worked themselves up into such an insanity of rage that only killing would satisfy. Each advanced on his hind legs until within six feet of the other. Then the younger gorilla began to fight. Stepping forward with marvelous quickness for such an ungainly animal, he struck a fall-like blow with his huge paws. Had the blow gone home, no mere flesh and blood, not even the big-boned frame of his antagonist, could have withstood it. But the old gorilla had been in too many death grapples to be caught so early in the fight. Even as the big arm swung around he sprang forward, coming in close so as to miss the full force of the swing. The next instant he had swung his own arm around the younger gorilla's neck, encircling it with four feet of steel muscles and holding his enemy's head stiff upright, so that he could not bring the terrible teeth into play. Then the old gorilla opened his heavy jaws, and getting a firm grip on the right shoulder of the younger gorilla, held on like a bull dog, teaching his way through the knotted muscle and sinews and shoulder blade of his opponent. At the same time the left arm of the old fighter wrapped itself about the younger gorilla in a rib-breaking grip. It was only for an instant, however, that things looked so desperate for the younger fighter. The first gorilla's splendid fighting ability and tremendous strength showed themselves. Whirling up his left arm he fastened his long fingers about his antagonist's throat and tried to break his grip and shove his head back. At first the only effect of this was to make the old fellow tighten his grip on the other's shoulder. Then the younger gorilla put forth all his strength. I could see the muscles of his arms, shoulders and back gather themselves into big knots and bunch up, as if they would break through the skin. The murderous deep-set eyes started forward until they were level with the cheek bones. A last desperate effort, and the big head went back, the tightly closed

ute, but seemed an hour, the two semi-human shapes stood there putting forth every energy. At last the younger fighter's face was within two inches of his opponent's head. The younger gorilla made a supreme effort, twisted his head suddenly and before his opponent could dodge had fastened his teeth in a death grip on the throat of the veteran fighter. The veteran was borne backward, carrying his foe down with him. Unless he could loosen the grip on his throat he was doomed, and the old fighter knew it. Over and over on the ground the two huge apes rolled, fighting desperately, but without sound save for the shrill hissing of their breath as it was forced from their heaving chests. The veteran of many a hard-fought jungle battle knew his own end had come. Up to this time the battle had been fought in silence; but as the old gorilla gave up the contest and felt the teeth of his antagonist sinking deeper and deeper into his throat, the pain was greater than he could bear. He broke into a wailing cry that echoed through the jungles. Again and again the cry rose up and then finally died out. The fierce, hard fighting, hard biting younger gorilla had been working his way through his antagonist's throat and had at last bitten through the wind pipe. The great fight was over, and the veteran of many similar contests had met the fate he had meted out to others. The last glimpse I had of the conqueror was, as with the glare of battle still in his eyes and covered from head to foot with his own blood and that of his enemy, he marched off in triumph toward her for whom he had fought so desperately and so well.

Crime in New York Is Decreasing.

A remarkable fact to which attention is called in the report of the State Prison commission is that the number of the inmates in prisons of New York state, has fallen in four years from 12,661 to 10,350, or over 18 per cent. There would seem some ground, therefore, for the gratifying assumption that crime is diminishing.

In the number of locomotives the United States comes first with a total of 86,746. Great Britain comes next with 19,002.