PRETORIA ALMOST IMPREGNABLE.

Nature and Art Have Made It So—In Condition to Withstand a Long Siege—Its Fortifications.

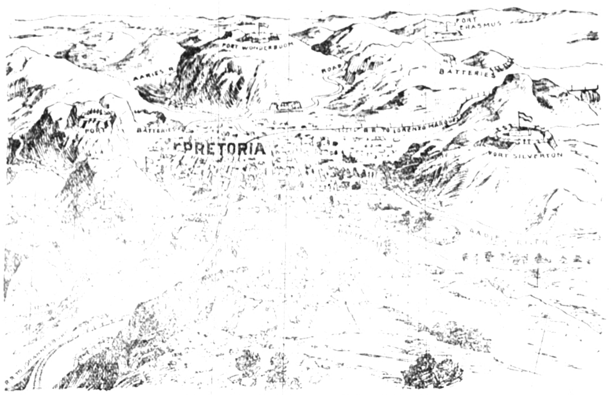
The most important place in South Africa at present is Pretoria, the capital of the Transvaal, where Oom Paul has made the most elaborate preparations to withstand a siege and where the Boers may be relied upon to make a most stubborn resistance. The place is defended by nature and art as few other towns in the world, and has been described by some military writers as being impregnable. On three sides of Pretoria the mountain ranges rise to elevations of 1,000 and 2,000 feet above the streets of the city, which itself is 4,500 feet above sea level, but 1,100 feet lower than the site of Johannesburg to the south. On the fourth side—the south and facing the approach from Johannesburg—the range flattens away to a vast level plateau, treeless, desolate, exposed at every point to the sweep of any guns that may command it. The town is 1,080 miles from Cape Town, 50 from Johannesburg. On the map it seems as easy of approach as a prairie village in Nebraska. But the map topographer fails to present the lofty, barren hills that face the southern plateau, the precipitous banks of Aaples river, the narrow gorges—so few in number—the innumerable "spion" or lookout kopjes that seem literally to leap from the bosom of the plain [illegible]

[illegible] sand bags are stacked up wherever shells from the enemy might strike. There are many hidden recesses, secret passages, complete telephone connections not only with each other, but with the government buildings in Pretoria. Searchlights are mounted in each structure so as to command the surrounding country at night. The magazines are underground, and are reported to be mined. Report has it also, that the near approaches are mined and that the electrical construction is such that considerable portion of an enemy's army might be blown into eternity before surrender came. For food, in the event of siege, enormous quantities of maize have been accumulated—enough, it is said, to feed the army and the population of Pretoria for five years. The supply of ammunition is calculated to be sufficient for two years. How many guns are mounted or will be it is difficult to estimate. The total artillery force of the Boers at present is estimated at 450 guns by the English.

The guns originally placed in the forts were 15-centimeter Creusots, but their number is not definitely known. M. Bloch has estimated that it will require but 500 men to each of these forts, each force supplied with ten modern guns, to keep the English at bay forever. Right or wrong, he maintains that occupying a besieging position, devoid of sustenance, the English will be in greater danger of starvation than the Boers, and that supplies cannot be brought in with such rapidity and [illegible] as to make the siege successful.

The fountains of water supply of Pretoria is within the radius of [illegible]. The westernmost fort is on the range of hills behind Pretoria, and lies at a distance of 31,000 feet from the city's center. There is a powerful redoubt to the southwest on the range of hills through which the transport road to Johannesburg passes. This completes, with various earth batteries, the circle of the larger works defending the Boer capital. Behind the great redoubt mentioned are the principal magazines, one excavated out of the solid rock, with a bombproof roof, and the other built into the kloop, also bombproof. Communication between the redoubt and the last-mentioned magazine is by means of a covered way. Roads connect all these forts with the capital, and they have pipes laid for water, as well as electric lights for the searchlights.

An English view of what can be done with the Pretoria fortifications is [illegible]



CITY OF PRETORIA, SHOWING DEFENSES.

[illegible]

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surreptitiously obtained. The title of the book is "Thus Spake the Wind," a very old religious poem of no particular interest.

and the silly fellows, when drawn up, were half dead from the heat and the poisonous smoke.

AGAINST THE ORGAN.

A Maine Parson Struggles and Comes Out Second Best.

In a Kennebec church Sunday week, says the Lewiston Journal, a new minister—that is, one who was being given a try—had about as much trouble as usually falls to the lot of one poor candidate. He arrived early at the church and found that the furnace was out of gear and that the auditorium was densely filled with smoke. The [illegible]

ALL DUE TO APPETITE.

Will the Girls of the Future Be a Race of Giantesses?

Why are almost all girls tall nowadays? Or, perhaps, one should rather say, how is it that modern maidens are so much more developed than those of a generation or two back? We have been assured that it is because they take so much more outdoor exercise, and because they go in for physical training, that they have literally grown up in this extraordinary fashion. It pleased a great many people to have this theory deduced. But we are never suffered to hold any theories long nowadays. Thus, one of those deplorably unromantic persons who revel in horrid prosaic facts that knock down all our prettiest and most poetical theories, has discovered the real reason why girls are so much taller at the end of the century than they were at the beginning and middle. The truth, we are told, is that they eat twice as much as their predecessors. [illegible]

WORLD'S SMALLEST BOOK.

It Is Less Than Half an Inch Square and Contains Thirteen Pages.

The smallest book in the world has just been printed in Cleveland, says the [illegible] ten of them were printed [illegible] of them is for sale. In all the catalogues of the rare book dealers what is called the Bijou Almanac is named as the smallest book in the world, and until now has been [illegible]. The Cleveland book breaks the record [illegible] lack of size for printed books. There are rare little volumes engraved on ivory fastened together like a book, but they are not really books in the estimation of collectors of miniature volumes. The Bijou Almanac is a real book, printed on real paper and bound in stiff little blue covers. It was made in London in 1839 by Schloss. It has sixty pages, a calendar for each month, and some wonderfully delicate little steel engravings. It is half an inch wide and five-eighths long and not much thicker than the cover of an ordinary book. The owner of this little book, which is worth several times its weight in gold, is Charles H. Meigs of 67 Eastman street, who is also the publisher of the other tiny book mentioned, the one that is the smallest in the world. This smallest book in the world measures just three-eighths of an inch by half an inch over all. There are thirteen pages in it, and the work has been done in a Cleveland printing establishment. The type was set by hand, and then the pages photographed down to the limit of distinctness, though the book can only be read with a magnifying glass. Under a strong glass, however, the work is seen to be distinct and perfect. It is printed on genuine India paper, and this is one of the most interesting things about the tiny book. The Oxford Press, the English Bible publishing concern, controls all the genuine India paper produced, and it was with the greatest difficulty that enough was procured to make even the ten copies of this tiny book. It is said that the paper was

Where the Yankee Was Slow.

[illegible] best man on earth. Every other nationality is getting a hand in on the Philippines. What is the matter with the American? He isn't coming fast enough and is missing big opportunities.

Eager for Gold.

[illegible] called [illegible] about which a curious but hardly credible story is told. When, in 1822, the [illegible] the volcano was [illegible]. Many of [illegible] thought that the [illegible] of the state was [illegible] than purest gold [illegible]. The puzzle was how to get it. But at last a few men more foolish and more venturesome than their mates had themselves lowered down until, by means of an iron chain with a bucket at the end of it, they could reach the fiery mass. Of course, as soon as the bucket neared the surface it was melted in a moment.

"PAT, THE BLACKSMITH."

A Humble Artisan Made Famous by His Picture.

[illegible] full-length picture, life size, in his blacksmith's apron, resting his brawny arm and blackened hand upon his hammer, while a youth at the bellows renews the red heat of the iron his employer has been laboring upon. The original, painted by John Neagle in 1826, is in the Pennsylvania Academy of Fine Arts; the replica is at the Boston Athenaeum library. "Pat, the blacksmith," as he was familiarly called in Philadelphia, was born in London, in 1779, and came to Philadelphia in 1793, where he died April 15, 1829. His early struggles made him become an ingenious blacksmith, and he was a local celebrity. He built many fire engines. He was once sent for to open an iron chest made by himself, the owner had lost the key. Pat dexterously performed the operation, and, holding the lid with one hand, presented the other with a demand for $10. It was refused. Pat let fall the lid and walked off, leaving the treasure as fast sealed as before. There was no remedy and reluctantly the owner of the strong box again sent for Pat. He promptly appeared and the box was instantly opened. The first demand of $10 was quickly offered; but no, "I must have $20 now," said the operator, and $20 was paid without a murmur, for the lid and the lock were still in the iron grasp of the lockmaker. The story of his incarceration was this: Lyon was the blacksmith and locksmith of the Bank of Pennsylvania. The vaults were entered and a large sum of money was carried off. Suspicion fell upon Lyon. Pat was arrested and imprisoned for a long time in the castle, which, by his desire, the painter has introduced into the historical portrait. In process of time the real culprit was found to be the watchman! Pat was released and made his old employers and recent persecutors pay handsome damages—$12,000, I believe. He went back to his anvil, forged his wealth and hammered iron bars into banknotes and eagles.

Almost There Already.

Miss Fortee—Yes, dear, we have been engaged for a long time, but what has prevented me from taking the irrevocable step has always been the fateful question, "Will he love me when I grow old?" Miss Tenny—Don't worry, darling, you'll soon know now.—Stray Stories.

A REMARKABLE WRECK.

A full-rigged ship was left lying in this queer position on the beach near Southampton three weeks ago, after a terrible storm. The crew escaped in boats.

Dairy Notes.

A patent has been issued in Germany covering a process of condensing milk by freezing and thawing it in a centrifugal separator when in motion. The work is said to be rendered easier by first separating the cream and condensing the skim milk, after which it is mixed with the cream. It is claimed for this kind of condensed milk that it can be again diluted to its original volume, and also that it does not have the sweet taste to which some people object in the condensed milk we now use. However, the mere patenting of a process does not prove its utility, and we may have to wait indefinitely for a demonstration of its value.

What is pure milk? The eye cannot tell and the nose cannot tell. Even the chemist and the microscopist fail, when each works by himself. Scarlet fever germs may get into it from poorly-washed dishes, typhoid fever germs may get into the cans when they are washed at some contaminated well, and there is not one chance in a million that they will ever be detected in the milk. The only safety is pasteurization of all milk being sent to the city. The dealers and the customers should insist on this. While it is true that 160 degrees of heat will not positively kill all tuberculosis germs, yet it can as a rule be depended on to kill all or render them harmless. But typhoid fever and scarlet fever germs perish at a less heat, and thus pasteurization is for them effective.

It was believed that when the different states adopted brands for their state cheese and put on a trade mark the cheese or butter would be protected. But as soon as the manufacturers did this the counterfeiters took hold [illegible]

Cow's Milk for Lambs.

A contributor to the Breeder's Gazette says: I notice that A. E. C. of Pleasant Hill, Kas., said in a late number that he tried feeding young lambs on cow's milk [illegible] ... 90 per cent of them but for cow's milk. I think over half those lambs got their first food from a heifer. I did not do much else for five or six weeks but attend to the lambs. As soon as a lamb said it wanted something to eat, if it could not get it from its mother I took it to the heifer, opened its mouth and put into it the little teat and squeezed milk into it.

If a lamb gets too hungry and chilled before it gets the milk it often dies, but I have filled them as full as they could hold with cow's milk before they were a half-hour old scores of times without hurting them. After a lamb gets a fill from a heifer it will take hold of a sheep's little teats much better. There have been days when I went to the young cow with a little lamb perhaps twenty times. It injured the heifer some as to giving milk, but that was nothing compared to saving fifty lambs. After the lambs were a few days old they were fed from a bottle with a rubber nipple. I fed every one that did not get enough from its mother for awhile until they began to eat grain and turnips. It is a novel sight to see forty or fifty lambs crowding around, struggling for the first suck from the bottle.

My lambs were all dropped last winter in January and February, and I saved 98 per cent of them. I did not take more than five or six to a cow because their mothers lacked milk. My first lamb weighed fifty-nine and one-half pounds at 8 weeks old. The heifer that fed successfully so many lambs ate about twenty-five pounds of turnips every day, which no doubt made her milk better for young lambs. I have lost less lambs than that noted breeder Lyman Hill (my neighbor), and I believe it is because I feed more turnips, though he feeds a great many swedes.

Prosperity Among Farmers.—I am aware that the idea prevails that the chances are much better for the accumulation of wealth in cities than on the farm. This is a very great mistake. In the city a small class has a great deal of wealth and a large class is in very moderate circumstances or in the depths of poverty. The great mass in the city are not as well off as those on the farm. The average wealth of 99 per cent of the inhabitants of nearly every city in Illinois is less than that of the surrounding country. —John T. Campbell.

KING DON:

A STORY OF MILITARY LIFE IN INDIA.

.....BY MAVOR ALLAN.....

CHAPTER IX.—(Continued.)

He fetched a camp stool and placed it for her under the shelter of the mainsail, and she took it with a little tremulous word of thanks. She did not beg him to sit by her, as once she would so naturally have done, and apparently Don dreaded a tete-a-tete likewise, for he made no offer to do so.

"Are you a good sailor?" he asked presently, stopping before her in his short walk to and fro.

"Yes, I think so—at least, I stood the passage out very well."

"The captain is rather afraid we are in for rough seas. There's too much wind, and he fears a storm before morning."

"I don't think I dread it much, so long as there is no lightning or thunder," she answered. "Do you?"

"I?" he queried. "Oh, I don't care a straw on my own account whatever happens."

She shivered in his clasp.

"Oh!" she cried, more to herself than to him, "how could we ever live to [illegible] after this?"

[illegible]

the horizon; then the glow faded, the fiery purple tints passed from cloud and wave, and suddenly it was night. With a shiver Lillie rose and stepped to Don's side.

"I am going below now," she said, coldly. "Good night."

The cold formality which had become already habitual to both seemed for the moment beyond Don to assume, for he took her hand, but did not release it.

"The storm is coming," he said. "Look!" Sea birds darted screaming along the crests of the waves, the vessel pitched and rolled helplessly in the trough of the billows, and over all the sky hung like a black pall. Don spoke again, and now more tenderness had crept into his voice.

"I wish for your sake the squall was over. You must try and go to sleep."

She shook her head.

"I don't feel like sleeping," she answered. She would have withdrawn her hand, but Don's clasp upon it tightened.

"Shall I come and sit with you for a while?" he asked gently.

"Oh, no!" The words broke from her abruptly, almost with shrinking dismay, and Don let her hand go, his [illegible]

[illegible]

... ment might be his last.

It was in a slight lull of the tempest's fury Lillie stole back on deck. The rain had been descending in hammering torrents, but now it came and went in gusts. The thunder was rolling away fainter and fainter; only the sea raged sullenly on. The wind lifted up its unwearied voice and the good ship plowed on its way.

The pitiful yielding to self-reproach had followed swiftly on Lillie's cold and bitter leave-taking of Don, and now love was battling for victory to speak some little word of wifely tenderness, despite that ever-haunting remembrance of the dark Afridi nullah where her father's blood had been shed.

Clinging to the companion rail she strove to peer through the darkness towards the spot where they had parted. Yes, he stood there still. But as she paused irresolute, looking at that figure on the taffrail so apparently unmoved, an awful fear clutched her heart. Creeping stealthily towards him on hands and feet, under the shadow of the bulwarks, was the snake-like form of a swarthy seaman, an Indian knife gripped between his teeth; and a hoarse cry—a cry that rang above the storm from stem to stern of the great ship—burst from Lillie's parched lips. The cry was one word: "Don!"

Her husband started and turned. Too late!

Through the darkness flashed a gleam of steel, and the Indian's knife, uplifted to plunge with deadly aim in his unconscious victim's back, was buried in Don's breast. For an instant waged a fierce, unequal hand-to-hand struggle. With the rolling ship the two figures swayed madly to and fro.

(To be continued.)

Her Cure.

He—"I understand you have been attending an ambulance class. Can you tell me what is the best thing to do for a broken heart?" She—"Oh, yes. Bind up the fractured portions with a gold ring, bathe them with orange-blossom water and apply plenty of raw rice. Guaranteed to be well in a month."

Polite Chinamen consider it a breach of etiquette to wear spectacles in company.