

MISCELLANEOUS.

Written for this Paper.

BIG CHINESE GUNS.

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SHANGHAI, China, March 20, 1894.—



NE hundred acres of factories for the making of arms and munitions of war!

Vast foundries for the smelting and rolling of steel!

Gun works turning out

cannons as big as the biggest now being made at the Washington navy yard! Shops covering acres devoted to the making of the latest of modern magazine rifles!

An army of two thousand celestials in blue gowns with their pig tails tightly wound about their halt-shaven heads manipulating with their slender, yellow fingers the finest of the modern world's improved machinery, and doing successfully all kinds of factory work under Chinese foremen!

These are some of the wonders I saw at the great government arsenal near here today.

Any one who thinks that China is asleep to what is going on in the modern world has only to visit one of its great government gun factories to be convinced of his mistake. I have spent some time at the gun works of Washington navy yard, where are being built the guns for our largest warships. We pride ourselves upon them as a nation and consider them among the finest gun works of the world. Away out here in China there are similar foundries doing even more wonderful work, and that to a large extent with native-made machinery, and just now with Chinese iron and Chinese coal. Of the two thousand men employed in the Shanghai works only two are foreigners, and these are consulting engineers, one of whom, Mr. N. E. Cornish, is an Englishman from Devonshire, who was for years connected with the great Armstrong gun works in England, and the other, Mr. Bunt, an Englishman who not only knows how to run all kinds of machinery, but has invented several engines, and who, with Mr. Cornish, is making many improvements in the Chinese munitions of war over those of other nations. It was through Mr. Cornish that I was able to go over the gun works, and with him I had chats with the Chinese managers, foremen and workmen.

Leaving the Hotel Des Colonies, in the foreign quarter of Shanghai, I rode in a jinriksha, pulled by two men, far out into the country. The day was cold, raw and rainy, but I decided to risk arrest by taking my camera with me, and, wrapped in oiled silk, it lay be-

tween my legs as we dashed through the muddy streets crowded with bare-legged coolies in hats as big as umbrellas and rain coats of a reddish brown jute, who were carrying heavy loads swung on poles from their shoulders. We passed many women in blue gowns of wadded cotton, who hobbled along on their little feet through the mud with a knock-kneed gait, and met at every turn the rikshas and sedan chairs of swell Chinamen, whose eyes were so shrouded by their big black spectacles that they looked like Gargantuan brownies rather than scholarly Chinese. Many of these swells had on their winter bonnets of wadded silk and their clothes were of the brightest of reds, blues and greens. Their bonnets covered the entire head and were fastened under the chin in a wadded cloth which protected the neck and throat. They were so made that only the front of the face was exposed to the weather, and they extended out behind into a sort of cape which fell to the waist and concealed their cues. The gowns of many of them were fur lined and the silk brocade of which they were made seemed more fit for a ball room than a rainy, muddy Chinese country ride. Beside these rich worked the poorest of the poor. We passed scores of sweating men pushing freight wheelbarrows, each containing a load for a horse, and jostled by the hundreds of other queer working characters who fill the country roads of China with as many travelers as you will find on the roads approaching one of our little cities on a circus day.

Just outside of the walls of the native city I passed a guard house filled with Chinese soldiers. The sun came out at the moment, and I attempted to photograph them. But when they saw the camera they scowled and went inside of the guard house. Not far from this I came to a fortification which I afterward learned was the barracks of the troops which the viceroy keeps here to guard the arsenal and to protect Shanghai. A white wall, perhaps twenty feet high, surrounded them, and I could only see the great flags of black net work embroidered with red Chinese figures, twenty odd feet long, which floated from a pole above the tent of the commander. I saw many soldiers, however, and I photographed a good natured one who evidently did not understand what my camera was. These soldiers were dressed in all sorts of bright colors, and the uniforms of many of them consisted of the brightest of blue cottonsacques, trimmed with black velvet and ornamented with red stripes. They wore wadded cotton pantaloons, which they tucked into black, short topped wadded cloth boots, and their heads were covered with stiff skull caps of silk. They look entirely different from the people about this part of China, and are much more muscular and are taller than the Chinaman we have in America. They come from the interior, and the best fighters among them are from the rebellious province of Hunan, where the insurrection against the missionaries of a year or so ago originated. There are only a few thousand of them in this barracks, and they are but a

small part of the army of the Viceroy of Nanking, who lives at his capital in the interior.

Reaching the arsenal we stopped for a moment under a white wall, on which was a gaudy painting of one of the heroes of Chinese mythology, who is supposed to give luck to the officers within, while one of the Chinese soldiers took my card into Mr. Cornish, and a moment later I was inside of these vast works and surrounded by the din of machinery. Practically the only difference between these works and those of any of the great gun factories of Christendom lies in the gorgeous colors of red, blue and green in which the Chinese delight and with which they paint not only the interior woodwork of their shops, but some of their machines as well, and in the fact that all of the work is done by Chinamen. The first room we entered was about the size of the biggest shop in the Washington navy yard. It covered, I judge, about an acre of space, and in it were being turned out some twelve-inch guns for the navy. You have seen pictures of such guns in the newspapers. They are the biggest made at our navy yard, and they are immense iron cannons, the barrels of which are thirty-five feet long, and which fire projectiles of steel which weigh a thousand pounds. To make one of these guns costs in the neighborhood of \$50,000, and the Chinese are now just finishing their fourth gun of this kind. Those completed have been tested, and shown equal to anything made in Europe or America, and the projectiles for the guns are made here. The Chinese, however, like the other nations of the world, now believe that these immense guns are not so good for defense and warfare on the sea as the smaller varieties, and they will build no more of them at present. Near these I saw some twenty five-ton guns, and then visited the shops, where about 300 Chinamen were at work making the latest improved patterns of Armstrong rapid firing guns. I looked at a 4.7 inch gun of this kind which had just been completed, and was shown its working. It moved so easily that a baby could have almost worked it, and the Chinese foreman in charge told me that they had just finished a dozen of these weapons, and that they were now working on some which would fire 100 pound shot.

China has no scruples as to patents, and she gets now all of the latest improvements in war machinery and copies them here. There is no doubt about the great mechanical ability of the Chinese. Here are two thousand men, who have been brought up on lines entirely different from those on which they are now working, and they make as expert workmen as our mechanics, who have had generations of hereditary descent and years of experience. A great part of the machinery used here was made by Chinamen, and Mr. Cornish tells me that he found that parts which he had thought it impossible for a Chinaman to turn out, and which he had expected would have to be imported at a great expense from Europe, had been made by these men from drawings. Some of them are so expert that only general directions and the knowledge of the results required need be given them, and they will straightway make the designs