

at the same time, be easily placed in the turret of a war ship or embrasure of a battery, and worked quickly and without difficulty. Of course there were many difficulties in the way of the construction of such a weapon. No steam-hammer such as that which Krupp possesses at Essen was to be found in England; no forges were built large enough for such a tremendous "heat;" no cranes were in position to hoist such a weight. But all these difficulties were speedily overcome by the skillful officials at Woolwich. The forges were built, a large steam-hammer of forty tons weight, with double-motion arrangement, and a striking power of nearly a thousand tons, made, and very soon all was in readiness to begin the construction of the great gun. Curious enough His Majesty the Emperor of Russia was the first to see one of its coils welded, and since that time the work has been gradually going on, till now the steel tube, the breech piece, one coil, and the trunnion are finished; so that it is certain that by June next the gun will be ready for trial. It will then consist of the following parts: A tough steel tube inside, weighing nearly sixteen tons, and measuring about twenty four feet in length; a breech piece coil twelve feet in length; one central coil, another coil nearer the muzzle, and the trunnion coil. The cable through which the fire from the friction tube is communicated to the cartridge inside the gun is of steel, and immensely strong.

"Such is the weapon upon which hopes of a victory over twenty inch armor plates are built. If it should succeed three more will be made immediately, and the four pieces placed on board the *Inflexible*, which will then be the most powerful armed vessel in the world. Possibly, at the same time, some addition may be made to her armor so that she may be as invulnerable as she is terrible. Meanwhile, it is satisfactory to note that the manufacture of thirty eight ton guns is being pushed forward with great alacrity in the factory, and that very soon a large number of these weapons will be ready for use. They are better in every respect than the Woolwich Infants, of which about only a dozen were made, and are much more effective than any pieces yet constructed on the Continent. Now that the pattern has been decided upon, and the lathes and turning machines adapted to the requirements of such immense weights of wrought iron, these big cannon can be manufactured with the greatest ease, and as one stands by and watches the rapidity with which breech-pieces, trunnions, and coils, are lifted hither and thither, now hoisted into position on a lathe, now lowered into a tank to be shrunk, the fear of artillery being outstripped by armour dies away. The revolution effected by the adoption of the Fraser principle of construction is so immense that it is impossible to say how large a gun may eventually be made, or what weight of shot may in the end be thrown. On the other hand, it is almost certain that a limit to the power of vessels to carry armor will eventually assert itself, and that while larger and more powerful artillery is being produced, improvement in the resistance of turrets and broadsides cannot be made to keep pace with those giant strides in the art of destruction. For the protection of forts there will, of course, be the backing of granite and earthworks, which will resist the impact of the shot or shell, and should the present experiments in the manufacture of steel in Germany be carried out and succeed, guns may have yet more work to do than artillerymen or engin-

ers at present anticipate. For the moment, however, there is no reason to believe that any metal can be contrived which will resist the tremendous blows that the guns of the future will be able to inflict upon it.

We are glad to see by the Journal of the Senate of South Carolina, that our old friend Mr. ROBERT A. Sisson has by a unanimous vote been re-elected reading Clerk of that body for the ensuing two years.

REVIEWS.

We have received the December number of the *Dominion Monthly* which has for its frontispiece the portrait of Prof. Daniel Wilson, LL.D., of Toronto. The leading articles are: Christmas in the Wood; A Mistake in Life (continued); Elgar Hunter's Promise; Life in the East Indies, A New Love a True Love (continued) &c.

ADDRESS TO MAJOR IRVINE.

(From the Winnipeg Standard.)

The following Address was presented to Major Irvine last Tuesday afternoon, by a Committee acting in behalf of the Mayor and Corporation of the City:—

To Lieut.-Col. A. G. Irvine, late commanding the Canadian Light Infantry.

Sir—It is with feelings of the deepest regret that we hear of your intended departure from amongst us.

Since your advent in this country with the glorious first expedition led by Wolseley, whose name is enshrined in the hearts of all true subjects of Her Majesty, your conduct has at all times been such, that it has merited our warmest approval and admiration, and endeared you, and the officers and men under you, to our inmost hearts, and we desire you, sir, to communicate to them our assurances that wherever they be cast by the waves of fate, there our best wishes for their welfare will follow.

During the years which have elapsed since you first arrived here, you have ever been found on the first to advance to the utmost of your power, the kind feeling which ought to exist between the Military and inhabitants of this Province; and if such kind feeling was ever interrupted, we know, dear sir, that not to you was it attributable.

At the time when our little Province was threatened with invasion by hordes of Fenian bandits, the alacrity with which you, sir, and the gallant band under your command, advanced to the front to protect our hearths and homes, will never be forgotten by us.

Had occasion required, we know that you would have rendered a good account of yourselves to your country and your Queen.

In the earnest hope that you may return to us, and in a position equal to your merits as a man and a soldier, and again asking you, sir, to accept for yourself, and to communicate to the gallant officers and men, who with you are leaving our prairie province, our appreciation of their conduct in the past and our best wishes for the future, we leave you with the words of the poet:

"Put up your weapon till the time shall serve,
This is no scene for blood. Valor that needs
The tongue's loud flourish, and a lady's eye,
May well be doubted, though we doubt not yours,
Your courage, sir, will keep. So let us part,
How we again shall meet—how part when met,
Let time and fate determine."

We, sir, the Mayor and Council of the City of Winnipeg, representing the united voice of the people, now bid you a kind adieu.

[SEAL.]

Signed by the Mayor and Members of the City Council.

The Address is beautifully engrossed upon parchment, and has the City seal attached. The following was the gallant Major's

REPLY:

Mr. Mayor and Gentlemen—No words can express to you my feelings of gratitude for your very kind address.

If there is anything that can in any way help to lighten our now depressed feelings at the thoughts of leaving the Province, it is the fact of feeling and knowing that we leave with your warmest and best wishes and that we do not leave unregretted.

To myself, as I suppose to others, the orders came that we were to be decreased very suddenly. At first I could scarcely realize that the news could be true; that after five years spent among you I was to go. As you know a soldier takes his orders as they come—no matter what—he doesn't question them; that is not his duty and that is how I am trying to school myself to take these orders. In the five years that have passed since I arrived in the Province I have had many under me, I have seen many changes but in the whole five years, of in my whole life, I never was so gratified as I am at this moment to feel that my course and the conduct of those under me is approved by the people of Winnipeg. My future as the futures of many of my comrades is uncertain, but I need not tell you how pleased I should be if I could think that I was to settle down on my homestead and become one of your citizens.

Mr. Mayor and Gentlemen—I crave your pardon for thus so imperfectly thanking you for your kind wishes to us; but the fact is the tongue is unable to express to you the depth of my feelings. Hoping to meet you again, and to always continue to merit your good opinion and wishing all prosperity to your city, I must say, *au revoir*.

One of the religious societies of the metropolis, describing London, says that the police boundaries cover 576 square miles and a population of 4,000,000 of inhabitants, that there are here gathered more Jews than there are in Palestine, more Scotch than there are in Edinburgh, more Irish than there are in Dublin, more Roman Catholics than there are in Rome, and that there is a great variety in the languages spoken. There is a birth in London every five minutes, and a death every eight minutes.

Thomas Smith, a private of the 20th Hussars was tried at the Central Criminal Court for the murder of Captain J. D. Bird, of the same regiment, by shooting him at Alder shot. The main ground of defence was that the prisoner had shot the officer by accident but it was shown that he had a revengeful motive, and he was found guilty and sentenced to death.

REMITTANCES Received on Subscription to THE VOLUNTEER REVIEW up to Saturday the 12th inst.

Griersville, Ont.—Ensign John Perrett, to September 16th, 1874.....\$2.00
Quebec, Q.—Major W. H. Forrest, to Aug. 7th, 2.00