

desired distance, and lowered in the directing pipe to the required depth and discharged. The velocity being measured was found to be seventeen knots, with a pressure of one thousand pounds per square inch. Four trials at this distance were witnessed, the torpedo rising to the surface after passing the point for which it was adjusted. The apparatus can be arranged for exploding by time fuse or by contact, and in failing to strike the object aimed at, can be arranged to sink or float, and be perfectly safe to handle.

### CORRESPONDENCE.

The Editor does not hold himself responsible for individual expressions of opinion in communications addressed to the VOLUNTEER REVIEW.

#### INSPECTION OF THE 63RD BATTALION OF RIFLES AT HALIFAX.

To the Editor of the VOLUNTEER REVIEW.

As no notice has yet appeared in your widely circulated paper, of the inspection of the 63rd Battalion, if you will allow me space I will proceed to give your readers a description of that event.

On the evening of the 4th December, our Battalion mustered with full ranks at the Drill Shed, Spring Gardens, and formed quarter column by the right in Review order, officers to the front. At eight o'clock with true military punctuality, Col. Lauie, D.A.G. arrived, accompanied by his staff. On the entrance of the D.A.G. the general salute was ordered and the splendid band of the Battalion played a few bars of a Slow March. Officers having taken post, the ranks were opened, and Colonel Laurie proceeded to make a minute inspection of the men, clothing, arms, and accoutrements of each company, with all of which he afterwards expressed himself perfectly satisfied. The Battalion was then drawn up in line of half battalions on each side of the room, turned inwards, and were put through the Manual and Firing Exercises, by the senior major, (who by the way is a gallant marine officer) the men acting like automata, with the exception of a few awkward recruits, who were judiciously placed in the rear rank. Quarter column having been again formed, the Battalion was marched out to the square adjoining, and there executed several manoeuvres, such as deploying, changing front, skirmishing with supports, &c. After an hour's drill the D.A.G. addressed the Battalion, expressing his satisfaction with the manner in which they had performed the several movements, as well as their soldierly and clean appearance, and steadiness in the ranks. After forming again in the Drill Shed, with a few words from our Colonel, we were dismissed, and now await anxiously the receipt of the munificent pay awarded by a generous and Liberal Government. I remain yours, &c.

QUIS SEPERABIT.

Correspondents will bear in mind that all communications sent us for publication the real name of the writer must be given along with the fictitious one, otherwise their communications will be thrown into the waste basket. In this instance, as it is an account of an inspection, we have departed from the general rule.

### REVIEWS.

We have received the first number of a neat little paper, entitled *The Independent*, published in Port Dover, County of Norfolk, Ont., by Mr. James Riddell. It is Conservative in politics.

THE ALDINE for January, 1875, is duly at hand, and certainly entitled to the credit of being the very best number yet issued of that beautiful publication. In both pictures and literary matter, this month, there is an infinite variety and corresponding excellence. Pictorially, the leading attractions are "A Daughter of Cleopatra" after Vernet-Lecompte, by John S. Davis—in admirable work of art, and supplying one of the highest types of the dusky Oriental beauty; three magnificent views of the mountains of the "Delaware Water Gap," illustrating that picturesque region to fine advantage; an attractive full page, also by Davis, "Fisherman's Luck;" "Love's Office," by Siebert, and "The appointment," by Otto Erdmann, two admirable companion pictures, telling their stories with life and vigor; a very striking "Silver Full Moon light," weirdly attractive, a fine view of the new "Western Union Telegraph Building," New York; and an elaborately executed portrait of Miss Margarotta B. Moore, the popular elocutionist. Such an array of pictorial charm is not often given in one number even by *The Aldine*.

The literary contents embrace the following rare collection: An instructive and very enjoyable paper on "Christmas in London," by Henry Morford; one of the most charmingly mischievous short stories of the period, by another of the new names which *The Aldine* is introducing to the public—evidently a Norsewoman, Einnu Stjerne Jarlsen (we should like to hear somebody pronounce that!); an excessively amusing sketch of "Student Life Abroad," by Fenno Douglas; a valuable peep at the growth of "The Mistletoe;" continuation of the popular serial, "Lost Lillian Bracy," a most touching story of primitive New England life, in "One Little Puritan," by Annette L. Noble; a pleasant translation, in the "Birthplace of Mozart's Zaubersfote" by Miss E. C. Gildemeister; incisive articles on Literature, Music, the Drama, etc. In addition, there are no less than four poems of merit; "A New Year's Wish," by Mrs. M. F. Butts; "Dead Days," by Mrs. Margaret J. Preston; "Abreast with the Storm," by John Vance Cheney; and "Songs of the Months," by Alice M. Guernsey. This makes, we repeat, an issue of equal excellence and variety, rare even for *The Aldine*, and evidences the fact that under the new editorial management, while nothing is to be lost in high artistic reputation, the literary merit of the publication is to be kept quite abreast with it.

The Aldine Company has determined to establish an Art Union, similar to the well known Art Union in England, and distributes its works of art, both sculpture and paintings, which are constantly collecting, among its subscribers. Art premiums, valued at \$2,500, will be distributed among each series of 5,000 subscribers. Subscription rickets, at \$6.00 each, entitle the holder to *The Aldine* for a year, to the new chromo, and to a ticket in the distribution of art premiums. The Aldine Company, publishers, No. 58 Maiden Lane, New York City.

The various results of experiments undertaken by the committee on explosives, with a view of ascertaining the practical effect of Professor Abol's proposed plan for the bursting of common shells filled with water, by means of a detonator consisting of dry compressed gun cotton enveloping a small cap of fulminate of mercury, are referred to by the *Army and Navy Gazette*. The practicability of exploding 16 pounder common shells in this manner was satisfactorily established some months ago, and the bursting of a shell into 300 fragments, whereas only about 30 pieces were produced by the explosion of an ordinary bursting charge of gunpowder. The effect of such an explosion amongst troops in the field could not be otherwise than disastrous in the extreme. Lately, however, experiments have been made with 9 inch common shells, which far exceed in effect that of any conducted with the field service common shell. On this occasion the bursting element employed was wet gun cotton in lieu of water. It will be remembered that the danger hitherto experienced in the employment of this explosive has been obviated by wetting it, a discovery having been made to the effect that it detonated equally well wet as dry. Nine inch shells were placed upright upon the sands at Shoeburyness, a boarding being erected around them at a convenient distance to confine the fragments. The projectiles being then filled with some eight or nine pounds of wet compressed gun cotton, and a "detonator," as described above, having been fitted into the fuse hole socket, they were fired by an ordinary electric fuse. The result was extraordinary, the shells bursting literally into thousands of pieces. The effect of such an explosion upon a vessel's deck amongst the crew can hardly be overestimated. It remains now only to prove whether the shell filled with gun cotton and its detonator will stand the shock of discharge.

Captain Acklon, of London, is credited with the latest invention for keeping meat in traversing long distances. It is very simple. He uses a car in outward appearance like an ordinary baggage car. A near inspection of it shows, however, that its works are not of wood or of any more solid nature than stout layers of felt, running from top to bottom of the sides between a sort of network of galvanised wire. The outer of these layers is kept constantly wet by means of a continuous supply of water from a cistern above. As the water presses down through the felt, it is evaporated by the heat of the air, and thus cools the interior of the car, which is separated from the wet felt by a double layer of dry felt interposed. If the air outside is hot, the evaporation is so much the quicker.

On the 11th inst the German brig Gustav, from New York, entered the harbor of Guatara, ten miles west of San Sebastian. On nearing the shore she was fired upon by the Carlists, notwithstanding she hoisted the German flag and put out signals of distress. The next day the brig stranded off Zuranz. Her crew were saved by the Republican volunteers, who took them to San Sebastian. The Carlists on shore fired on the boats during the rescue of the crew, and afterward seized the cargo of the abandoned vessel. An envoy has been sent to the Carlist lines to negotiate for its restoration.