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# The Volunteer Review

## AND MILITARY AND NAVAL GAZETTE.

A Journal Devoted to the Interests of the Military and Naval Forces of the Dominion of Canada

VOL. VIII.

OTTAWA, (CANADA,) TUESDAY, NOVEMBER 3, 1874.

No. 44.

### NEWS OF THE WEEK.

The Lepine trial for the murder of Thomas Scott, at Winnipeg, has come to a close after a sitting of two weeks, and a verdict of guilty rendered by the jury with a recommendation to mercy. The sentence at last accounts from Winnipeg, had not been pronounced on Lepine. The other members of the so-called provisional government who are implicated in the murder of Scott, will likely take their lives immediately to parts unknown fearing the fate of Lepine.

The consecration of Mgr Duhamel to the Roman Catholic see of Ottawa took place at the Capital on the 28th inst.

Col. David, sentenced to two years incarceration in the penitentiary for embezzlement, has been pardoned and released.

Major D. A. Macdonald, who has been absent in the North West for some time in connection with the supplies for the troops in Manitoba, returned to Ottawa on the 28th looking nothing the worse for his trip.

The Minister of Justice has received telegraphic information by way of Fort Garry of the arrival on the 16th inst. in fifteen days from Milk River, at Fort Appelle, of Colonel French with that portion of the Mounted Police Force en route for headquarters at Fort Pelly, where they will be stationed for the winter. The detachment in question averaged twenty five miles march per diem, and had splendid weather. They hoped weather permitting, to reach Fort Pelly in five or six days afterward; and have therefore probably reached their destination by this time.

Thursday last, the day set apart by the Lieut. Governor of Ontario, as a day of thanks giving to Almighty God for the bountiful harvest he has blessed the country with, was universally observed throughout the Province Divine Services being held in the various places of public worship.

A letter was received at Halifax on the 29th announcing that Sadler, the champion of England, is willing to row George Brown on the terms proposed by Sadler, in two months from the signing of the agreement.

The troubles in the Southern States are increasing, and must sooner or later culminate in open rebellion if we may judge from the following extract:—"The officers of the steamer *Era* report, that the greatest consternation prevails at all points between Shreveport and Alexandria. Cavalry are

now coming up the river arresting men as they progress. Many planters have fled from their homes, and the Negroes have gathered in large numbers at the towns along the river, leaving unpicked the finest cotton crop in several years."

The *Herald's* New Orleans special says the Conservatives have held a meeting and decided to commence criminal proceedings against Kellogg, Longstreet, Badger and all the Radical leaders for murder. The charge will be conspiracy on the 14th Sept. against the lives of citizens who in the exercise of rights guaranteed them under the constitution, in retaining arms. Affidavits are being prepared, and two U. S. Commissioners agree to issue warrants. If Marshal Packard refuses to execute them, the Commissioner will direct Gen. Emery to do so, and under the President's decision he must execute the order of a U. S. court as represented in the person of a Commissioner. While the affidavits will be filed, warrants will not be issued before the election unless further arrests of white men are made. As the offence charged is murder, all who are arrested must lie in prison.

The *Coloquie Gazette* says it is authorized to give a complete contradiction to the assertion in the *Vienna Vaterland* that Lady William Russell and the son of Lord Odo Russell had joined the Catholic Church.

The project of marriage between Princess Thyra of Denmark and the Crown Prince of Hanover, has been abandoned.

A meeting of the directors of several Italian newspapers was held to day to devise means for the relief of Garibaldi. It was proposed to raise \$10,000 and present to him as a testimonial offering.

The preliminary examination of Count Von Arnim terminated on the 27th. The Count was released on bail upon the advice of his physicians, and immediately went to his residence in Berlin. He will probably go to N. Co. for the benefit of his health.

The bail required for the release of Count Von Arnim was \$100,000.

The Emperor William has written a reply to the Pope's letter, protesting against the persecution of German Bishops. The Emperor says Germany has done all in her power to live at peace with the Church of Rome, but that she is bound to protect the State against the violent attacks and conspiracies of the Clergy.

The Turkish Commission at P. dgoritz in Albania has ordered the arrest of a number of persons implicated in the murder of Montenegrins. Reinforcements have been sent to the Turkish troops in Albania,

The *Times of India* newspaper of October 27th, announces that Murray Thompson the defender of Cawnpore, fails to identify the person who claims to be Nana Sahib, though he says, there is certainly a likeness. The prisoner declares he was drunk when he falsely confessed that he was Nana Sahib. He states that he was arrested by mistake in 1864, and subsequently released, and claims that he has relatives who will recognize him.

The Austrian Government has informed Porto of its intention to conclude commercial arrangements with his principalities, and has intimated that it considers the discussion of the subject closed. Turkey is endeavoring to secure a stipulation that the principalities shall obtain the Porte's sanction before concluding any arrangements, but to this Austria declined to agree. Germany and Russia have informed the Porte that they approve of the views of Austria, but do not say whether they intend to follow her example.

A dispatch from Cattars says the Porte has refused the request of the Montenegrins that the consuls of foreign powers be admitted to participate in the investigation of the late outrages.

The *Daily News* says that Russia and Germany have also notified the Porte that they intend to make commercial convention with the Danubian principalities.

*Le Nord*, the organ of the Prussian Government, says the Montenegrin massacre cannot be overlooked. Turkey must mete out speedy justice to the perpetrators, and make reparation for their crime. The great powers have advised the Porte to take this course.

The Inman steamship *City of Berlin*, of 6,000 tons burthen, was launched on the Clyde on the 28th ult.

John Lillywhite, the veteran cricketer and compiler of several works on the national game, died on Wednesday 27th ult. in his forty eight year.

The people of Paris will soon present to Queen Victoria an illuminated address thanking England for her manifestations of sympathy at the conclusion of the siege.

The German Reichstag was opened on the 29th ult., by Emperor William in person.

Mr. John Laird, the well known ship builder, and member of Parliament for Birkenhead died on the 26th ult.

Capt. Lang, wife and child, and seven of the crew of the schooner *Dauntless*, of Halifax, which foundered on the 19th, have been picked up. They were four days in the boat, and lived on half a biscuit a day.

## TORPEDO EXPERIMENTS AT NEWPORT.

From the Editor of the Army and Navy Journal.

SIR: Undoubtedly one of the most interesting events connected with the tour of inspection of the Senate Naval Committee, in the U. S. S. *Despatch*, was the witnessing of the experiments at the U. S. Torpedo Station, at Newport. A more lovely day could not have been desired. The water was almost without a ripple, and the rather unusual clearness of the atmosphere, lent a peculiar brilliancy to the spray of the various columns of water thrown up by the numerous torpedoes.

By 10 A.M. the harbor was dotted with hundreds of sail and row boats, and the Torpedo Station thronged with spectators; the officers and midshipmen of the practiseship *Constellation*, the *Intrepid* and the *Despatch* forming no small proportion of the expectant crowd. The programme of experiments was to have commenced at 11 A.M., but owing to the expected arrival of the Secretary of the Navy, it was deferred till afternoon, the guests meanwhile being amply occupied during the long noon hours by an elegant lunch, provided by Captain Simpson, the commandant of the station.

Shortly after 2 P.M., the first torpedo was exploded. The object of this experiment was to show the action of an electrical ground torpedo in its simplest form, viz., a simple iron case, containing 100 lbs. of powder, lying at the bottom in 10 feet of water, at about 200 yards from the wharf in the inner harbour, and connected with the shore by two insulated cables, the firing being accomplished by a Farmer's Dynamo Electric Machine.

The effect of the explosion was very fine—a large column of water was thrown full 100 feet in the air, and fell with a heavy crash, leaving showers of mist to sparkle in the sunlight as they were drifted slowly towards the shore by the scarcely perceptible breeze. The explosion was over in far less time than it takes to describe it, and it is hard to conceive that to produce this apparently simple effect with certainty, it should require so much brain work and experiment as it actually has done to attain it. The simple matter of a water tight joint for the entrance of the cables to the torpedo, one that would be water proof at all depths, readily adjustable and durable in all climates, has required years of downright hard work to bring it to its present state of perfection. The fuze, too, is a perfect study in itself, and as for the electric machine, it will suffice to say that the Farmer's machine is an instrument which has shown its superiority for certainty and magnitude of effect over every other description of mechanical electrical apparatus, either foreign or domestic, which it has been possible to procure at the station since its organization in 1869, a statement of no small importance considering the great variety of rejected apparatus to be seen in the Electrical Department of the station.

Numbers 2 and 3 were ground torpedoes, the explosion of which was effected by ingeniously devised circuit closers of different descriptions invented at the station. As the experiment was intended only to show the effectiveness of this method of exploding a submerged charge by the contact of a passing vessel, and not in reality to destroy the boat used in the operation, the torpedoes were placed at the bottom, at some distance from the small buoy containing the circuit closer, whose position was indicated for the convenience of the spectators by a small staff attached to each buoy, and projecting above the surface of the

water. The results were excellent. At the instant that the small sail boat used for its purpose was seen to be in contact with a staff, the explosion followed as if by magic. Though the torpedo was far removed from the point of contact, one could easily imagine what would have been the effect had each torpedo been directly under its own circuit closer as in actual warfare. Nos. 4 and 5 were boat torpedoes, the regulation iron case now furnished to all vessels in the U. S. Navy. They were fired from spars rigged out from the bows of a frigate's launch, the operation being conducted by the class of officers now under instruction at the station.

The rigging out was effected, and the explosions occurred in rapid succession, with very fine effect to the eye of the ordinary observer, but to that of the modern seaman the practicability of such an arrangement in actual warfare was rendered doubtful from the fact of a rowing launch being used: a condition of affairs rendered necessary, however, in consequence of the breaking of a shaft in the steam launch generally used for such work.

Numbers 6 and 7 were improvised torpedoes, viz. A water breaker well pitched inside and out, for Uncle Sam is too poor to use specially prepared iron cases for every emergency, and these experiments were well calculated to show what could be done when one is obliged to make use of the means nearest at hand to accomplish the desired effect, a fact which few of your readers will doubt when they recall the famous "beer barrel" torpedoes of the Confederates. No. 8 was a 300-pounder, planted in about 20 feet of water, and fired by means of two plane tables. The object of this arrangement was to show the method of locating the position of a ground torpedo by means of cross-bearings taken from two different points on the shore, thus doing away with the necessity of any buoy or other marker on the surface of the water to give warning to the enemy of the location of the charge. The sight bar of each plane table is kept continually pointed to the approaching vessel, and each closes a break in the circuit between the firing battery and the torpedo fuze at the instant that it points exactly to the position of the submerged charge. As the object of the experiment was merely to show the principle of the arrangement, no boat was used, but a small buoy directly over the torpedo indicated its position, and the result of the experiment plainly showed that no explosion could possibly occur except when the sight bars were pointing in the exact direction of the buoy, but when they did point to this spot *simultaneously*, the firing of the charge was certain to be effected. Contrary to what a casual observer would expect, there was less to please the eye in the explosion of 300 lbs. of powder, in 20 ft. of water, than that of 100 lbs. in 10 ft., and, in deed, it was noticeable that the explosion of the simple barrels in shallow water produced a more perfectly symmetrical column than which followed the explosion of their more scientific neighbours of heavy iron.

After witnessing these explosions, all of which occurred in the inner harbor, the committee repaired to the opposite side of the island, where the location of the torpedoes in our outer harbor was pointed out, and they were then conducted to the north end of the island, where experiment No. 9 awaited their arrival. This experiment was to consist in showing the effect of unconfined dynamite on wrought iron. The block of metal was the best of heavy forging 4 in. thick, and shaped somewhat like a letter L,

the length being about 8 in., and the width about 5 in. at the narrowest part and 7 in. at the widest. The weight of the iron was 66 lbs. 9 oz.; and its specific gravity 7.869. 4½ lbs. of 75 per cent. dynamite (75 of nitro-glycerine to 25 of silica) was placed one the iron, and held in position by a box of pine, of the same shape as the metal block, and without top or bottom. Two electric fuzes were inserted in the mass (which very much resembled brown sugar), and the observers repaired to a safe distance from whence they were shown, instead of the experiment intended, a remarkable exemplification of one of the peculiar qualities of this formidable explosive. By accident, the fuzes inserted were ordinary powder exploders, charged only with rifle powder, instead of fulminate of mercury, which constitutes the usual exploding charge for nitro-glycerine and its compounds.

On passing the electric current, the fuzes exploded, setting fire to the nitro-glycerine in the dynamite, which burned harmlessly away, and so quickly as to merely char the inside of the wooden frame leaving the silica in a dry powder on the surface of the iron. Later in the day the experiment was repeated, except as regards the kind of fuze. The block of iron was placed as before on a mass of granite, about 30 in. thick by 4 ft. long and 2 feet breadth, near the water's edge.

On passing the current, the dynamite exploded with tremendous violence, the mass of iron bounding into the air some thirty feet, and falling into the water, while the solid granite was badly shattered in the vicinity of the position occupied by the iron, besides being broken completely in two. The iron on being taken from the water was too hot to hold in the hands, and while the upper surface was deeply *dished*, besides being opened in the direction of the fibre at various points, the lower surface presented an exact imprint of the rough surface of the granite on which it had rested. It may be well to note here for the benefit of inquiring readers, that when the specific gravity was taken on the following day it was only 7.702, showing the iron to have become lighter under the action of this rather extraordinary trip-hammer.

Following the first experiment with the dynamite came the grand feature of the day, the blowing up of the the *Cornfield Point*. This vessel was formerly a lightship, a strongly built craft about 80 ft. long by 25 ft. beam, and light as a cork, only drawing 5 ft. of water, with high wall sides, formerly painted red, but now of a dirty pinkish hue. Her lightness was a matter of considerable annoyance to the officers of the station, but the danger of impeding navigation in case she should sink if loaded with stone, besides the lack of such ballast at the disposal of the station, and above all, the excessive difficulty of the towing her, whether ballasted with stone or water, or even when light, with the steam facilities of the station, rendered it advisable to abandon all projects for increasing her weight or draught.

The torpedo, or rather group of torpedoes, consisted of 120 lbs. of nitro glycerine, placed in 4 cans of heavy galvanized iron, each containing 30 lbs. They were placed in 40 feet of water, and arranged in a square of 40 feet on a side, the torpedo being 15 feet below the surface of the water. They represented a submarine mine, such as could be used in actual warfare; planted in deep water, in the ordinary channel of a harbor, at such a depth as not to interfere with navigation, their situation noted by a position indicator on shore; their connecting wires weighted

to the bottom of the harbour to prevent entanglement with floating objects; their electrical condition tested, as to continuity and resistance, both before and after planting, and all other conditions, with one exception completely fulfilled, to render them a controllable source of hidden mischief for a day a week, or a year. The one exception consisted in the torpedoes being suspended from buoys, at the surface, whereas in actual warfare an air chamber in each torpedo would have given them the requisite buoyancy, and at the same time hidden them from view. The buoys were however, in this case necessary to afford an accurate idea of the space through which to tow the unwieldy craft, as well as to facilitate the view of spectators from any point in the harbor.

The theory of the experiment consisted in so disposing a given amount of explosive substance, as to transmit its destructive effect to a greater surface of overlying water, than could possibly be effected were the entire amount of explosive confined in a single case. Most people are aware that, in torpedo work, the radius of destructive effect of any single torpedo is remarkably small, so small, indeed, that practically the object to be destroyed must be directly over it. Suppose that four single torpedoes be so placed, with regard to each other, then, at such point of impingement, there would probably be a combined upward effect due to any two adjacent torpedoes; while, in centre of the square; described by the position of the four, there should be a still greater upward effect, due to the combined effort of all four; this combined effect being independent of what each would produce by itself on any object in its immediate vicinity, and far beyond the limits of effect of any large torpedo in the position occupied by the centre of the square. In the case before us, as previously stated, the sides of the square were 40 feet in length, affording a surface of 1,600 square feet, supposed to be absolutely protected, to say nothing of the possible damage to be received in approaching too nearly to the corners of the square even on the outside. The position of the group was shown by a "Siemens' Position Indicator," an electrical apparatus by means of which an operator at one extremity of a base line is kept continually informed of the bearing of any object as seen from the other extremity. This information is conveyed by a pointer, on a chart in front of the operator, which moves in unison with a telescope at the other extremity of the base, the motion of the pointer being given by a magneto-electric apparatus, in the hands of the observer with the telescope.

As the hulk was seen approaching the locality of the four buoys, she appeared to be moving in a direct line for the centre of the group, unfortunately, however, her unwieldiness caused her to deviate considerably from this line, and the four torpedoes were exploded simultaneously. The shock of the discharge was very heavy and sharp. The hulk was raised bodily from 12 to 18 inches from the surface, amidst a tremendous body of water, which, unlike the regular dome shaped column of the powder torpedo, appeared to be torn into a million fragments out bodily from the smooth surface of the harbor.

The uprush appeared to throw the hulk violently over to starboard while in mid air, and the subsiding of the waters showed her to have a permanent list in that direction, which was soon shown to be caused by the water rushing through a hole in the star-

board bow, caused by torpedo No. 2, the nearest one to her at the time of the explosion. Immediately after the experiment, the hulk was found to be making water so fast that she was towed to the side of the break water, at the north end of the island, where she shortly sank. An inspection of her injuries, while alongside the breakwater, showed her to be shattered badly on the stem and stern post, and to be hogged six inches amidships. The injuries on the starboard bow could not be examined, as they were well under her bottom, and the water was entering rapidly. Around the stem, the hand could be inserted where the butt ends of the planks had formerly fitted into the rabbet, from a height of six feet above the water's edge to as far below as one could see. The stern post presented nearly a similar appearance, and the butts of the deck planks were separated full two inches from the covering board. The vessel was leaking fore and aft; but the most remarkable result of the explosion, as confirmatory of the theory of the group, was the hogging of the vessel.

Nos. 2 and 3 individually shattered the bow and stern, No. 2 being very nearly, though neither was directly under her. Nos. 1 and 4 undoubtedly had little to do, but had the vessel being passing, as it was intended she should do, there seems scarcely a doubt but that she would have broken completely in two. As it was, her extreme lightness was her only salvation from instant destruction. The effect of the experiment was peculiar. As few of the spectators had ever seen a torpedo exploded beneath a vessel, and as she was not instantly disintegrated, with her masts sent flying into the air like so many rockets, some little disappointment was felt, and as several bystanders remarked, "it was not much for show after all." Had the whole of the nitro-glycerine been in one case, and hung only 3 feet beneath a buoy on the surface, its effect would undoubtedly have equalled the expectations of the most sanguine, had the hulk been brought over it; but however beautiful the spectacle, 'twould not have been "war" after all, and as the Newport daily very justly remarked of the vessel "Like Mercutio's," her wound sufficed.

Following this experiment, came the ignition of a torpedo near Rose Island, through a mile of cable laid from the Torpedo Station to that point. This explosion, unlike those which preceded it, was effected by a battery of cells, and the sudden rising of a huge column of water at such a great distance at the instant the word of command was given, impressed one very forcibly with the almost unlimited distance at which these submarine engines can be operated. The next experiment was to show the ability of a large Farmer's machine to fire a great number of torpedoes at once, should occasion require. For this experiment a large machine, in regular use at the station for the production of an electric light, was properly adjusted, and 640 fuses were connected in 8 circuits of 80 each. On passing the current all but a few exploded, and these, as was expected, were found to be irregular in resistance and defective. The capacity of this machine is rated at about 2,000 fuses. After this exhibition, the exercises of the day were concluded by the successful detonation of the dynamite, which has been already described, and after witnessing the effect of this powerful explosive, the committee repaired on board the *Despatch*, apparently well pleased with the day's exhibition.

On the following day the experiments

were continued on board the *Intrepid*; the committee, however, accompanying the *Intrepid* in the *Despatch*. The experiments consisted in the destruction of the schooner *Unas*, a weather beaten craft of about 40 tons. As the *Despatch* was to leave for Boston at noon, an early start was made, the *Intrepid* getting underway, with the hulk in tow, at 8.30, and the *Despatch* at 9.30 A. M. Arriving near the light ship, outside the harbor, the hulk was dropped, and the *Intrepid* prepared to run for her with a Harvey Towing Torpedo. The torpedo exploder was a simple electric fuze intended to be fired at will, the fuze wire connecting the torpedo with the ship as well as the tow-line, but taking none of the strain. The torpedo being launched, and a sufficient scope of cable being reeled out, the *Intrepid* approached the hulk from such a direction as to pass under her stern, running so close that the towline on the torpedo proved long enough to hide it behind the bow of the schooner, so that the proper instant for igniting the charge could not be taken advantage of, and it was exploded a little prematurely, doing but slight damage to the vessel. The *Intrepid* then rigged out her port spar torpedo, and bearing down on a line parallel with the hulk, succeeded in placing her torpedo well underneath her midships, and exploded it with terrible effect. The hulk was completely destroyed only a portion of her stern appearing above the surface of the water. This portion of the wreck was subsequently destroyed by the starboard spar torpedo, leaving scarcely a chip on the surface to mark the spot where the vessel was demolished. This ended the morning's experiments, and both vessels immediately returned to their anchorage, the *Despatch* leaving again in an hour with the committee for Boston.

EYE WITNESS.

A despatch from Madrid Sept. 4th, reported that two thousand men would be sent to Cuba in a few days to reinforce the Spanish troops on that island. It was also reported that Carlists had abandoned the siege of Puigcerda. The failure of the insurgents to capture the place caused great rejoicing in Madrid. The Carlists are intrenching themselves around Batao. A special despatch to the London *Times*, from Madrid, says that either Gen. Moriones will be appointed Commander-in-Chief of the army, or Marshal Serrano will be styled *Generalissimo*, with power to appoint the generals. The German men of war *Neutilus* and *Albatross* returned to Santander Sept. 5, from San Sebastian. The Carlists fired on them from Guetaria, ten miles west of San Sebastian. The Germans replied by throwing 24 shells into the town. Gen. Primo de Rivera has been appointed Captain General of Madrid.

The project to construct a tunnel between France and England is assuming a practical phase. The capitalists and engineers embarked in this gigantic enterprise demand a concession of thirty years instead of the ninety-nine usually accorded to railway companies, and ask for neither guarantee nor grant. Further, they are ready to advance a sum of four millions for preliminary investigations. The project in question consists in the immersing of a duct on the English and French coasts, and the boring of two long galleries from each side. Of the result of the enterprise, say the *Journal de Calais*, there can be no doubt.

## DOMINION OF CANADA.



## MILITIA GENERAL ORDERS.

## HEAD QUARTERS,

Ottawa, 23rd October, 1874.

## MILITIA GENERAL ORDERS (29).

No. 1.

## ACTIVE MILITIA.

## PROVINCE OF ONTARIO.

1st Battalion, Governor General's Foot Guards.

To be Lieutenant :

Ensign Belmont Aumond, V.B., vice W. R. Bell, appointed Assistant Surgeon.

To be Assistant Surgeon.

William Ralph Bell, Esquire, vice Henry P. Wright, whose resignation is hereby accepted.

12th Battalion of Infantry, or "Fork Rangers."

To be Paymaster :

Lieutenant James Richard Stevenson, M.S., from No. 5 Company, vice Joseph Cawthra, whose resignation is hereby accepted.

No. 1 Company, Scarborough.

The resignation of Ensign John Burke is hereby accepted.

No. 2 Company, Aurora.

The resignation of Ensign Walter Young Andrews is hereby accepted.

32nd "Bruce" Battalion of Infantry

No. 1 Company, Southampton.

To be Lieutenant, provisionally :

Morgan Caldwell, Gentleman, vice Biggar, promoted.

31st "Ontario" Battalion of Infantry.

Major Thomas Hodgson is hereby permitted to retire retaining rank.

35th Battalion of Infantry, or "The Simcoe Foresters."

No. 1 Company, Barrie.

To be Lieutenant, provisionally :

Paymaster Sergeant Donald E. Sutherland, vice Green, retired.

Ensign Henry F. Ward, having left limits his name is hereby removed from the list of Officers of the Active Militia.

37th "Haldimand" Battalion of Rifles.

No. 4 Company, Hagersville.

To be Lieutenant provisionally :

Henry Almas, Gentleman, vice Augustus A. Almas, left limits.

No. 7 Company, Caledonia.

To be Lieutenant, provisionally :

William Humphroy Nelles, Gentleman, vice Whiddon promoted.

The resignation of Ensign James Williamson is hereby accepted.

42nd "Brockville" Battalion of Infantry.

No. 3 Company, Perth.

Adverting to G. O. 25th June, 1869, read "Arthur James Matheson, who is hereby permitted to retire with rank of Lieutenant," instead of "A. J. Matheson, whose resignation is hereby accepted." And adverting to G. O. (26) 9th October, 1874, read, "To be Lieutenant, with rank in corps from 20th June, 1874, Lieutenant Arthur James Matheson, M.S., from Retired List," instead of "To be Lieutenant, from 20th June, 1874 : Sergeant-Major Arthur J. Matheson, M.S."

Windsor Infantry Company.

To be Captain :

Lieutenant Frederick T. Rice, V.B., vice Mark Richards, whose resignation is hereby accepted.

To be Lieutenant, provisionally :

Sergeant George Cheyne, vice Rice promoted.

Ensign John Longshaw, having failed to attend the drills, his name is hereby removed from the list of Officers of the Active Militia.

## CONFIRMATION OF RANK.

Lieutenant Frederick T. Rice, V.B., Windsor Infantry Company, from 16th September, 1874.

## PROVINCE OF QUEBEC.

No. 1 Troop, Montreal Cavalry.

To be Captain :

Lieutenant John Tees, C.S., vice Brevet Major James Muir who is hereby permitted to retire retaining his Brevet rank.

To be Lieutenant, provisionally :

Sergeant Colin McArthur, vice Tees, promoted.

The resignation of Cornet John Ross Mitchell is hereby accepted.

3rd Battalion "Victoria Rifles" Montreal.

To be Captain :

Charles Edward Torrance, Esquire, M.S., formerly a Lieutenant in this Battalion, vice John Charles Yates, who is hereby permitted to retire retaining rank.

The resignation of Lieutenant James Kidd Oswald is hereby accepted.

9th Battalion of Rifles, or "Voltigeurs de Quebec,"

No. 3 Company.

The resignation of Lieutenant George Simard is hereby accepted.

21st Battalion, or "Richelieu Light Infantry."

No. 3 Company, St. John's

To be Captain :

Captain and Paymaster Alexis Bertrand, V.B., vice Brevet Major Price Fletcher, who is hereby permitted to retire retaining his Brevet rank.

61st "Montmagny and L'Islet" Battalion of Infantry.

No. 3 Company, Cap St. Ignace.

To be Lieutenant :

George Edouard Mercier, Gentleman, M.S., vice Gamache, appointed Paymaster.

The resignation of Ensign E. Methot is hereby accepted.

79th "Shefford" Battalion of Infantry, or "Highlanders."

No. 7 Company, Lawrenceville.

To be Ensign, provisionally :

Sergeant Edward Williams, vice Beers, resigned.

Lieutenant Edouard Forgeau, having left limits, his name is hereby removed from the list of Officers of the Active Militia.

## PROVINCE OF NEW BRUNSWICK.

Bathurst Infantry Company.

The Bathurst Infantry Company having become non-effective is hereby removed

from the list of Corps of the Active Militia. —The resignation of Captain Kennedy F. Borns is hereby accepted, Lieutenant John E. Baldwin and Ensign Gavin Smith are hereby removed from the List of Officers of the Active Militia.

CONFIRMATION OF RANK.

1st Lieutenant Charles William Drury, G. S. No. 1 Battery, N.B. Brigade of Garrison Artillery, from 13th October, 1874.

PROVINCE OF NOVA SCOTIA.

63rd "Halifax" Battalion of Rifles.

To be Captains:

- Lieutenant Thomas Joseph Welsh, V. B., vice Cummins, promoted
- Lieutenant B. Berceley Bond, V. B., vice Ritchie, promoted.

No. 2.

CERTIFICATES GRANTED.

SCHOOLS OF GUNNERY.

PROVINCE OF ONTARIO.

FIRST CLASS "SHORT COURSE" CERTIFICATES.

Regimental Divisions.	Names.
City of St. John,	—1st Lieutenant Charles William Drury, No. 1 Battery, N. Brigade of G. A.
City of Ottawa,	—Corporal A. J. Byrnes, Ottawa Brigade of G. A.

BOARDS OF EXAMINERS.

PROVINCE OF ONTARIO.

SECOND CLASS CERTIFICATES.

Lieutenant Frederick T. Rice, Windsor Infantry Company.

By Command of his Excellency the Administrator of the Government,  
WALKER POWELL, Lieut. Col  
Deputy Adjutant General of Militia,  
Canada.

On the 20th of June a treaty of friendship, commerce and navigation was signed in Peking between the Peruvian Envoy and the Chinese Government, conceding to Peru the privileges accorded to the most favored nations, and permitting the free departure from Chinese ports of laborers for Peru, under a guarantee from the last named power for the humane and proper treatment of the emigrants.

Since January 1st, 1874, nineteen tons of immoral literature have been seized in New York by the Society for the suppression of vice, and destroyed.

RIFLE COMPETITION.

LENNOX AND ADDINGTON RIFLE ASSOCIATION.

The first annual prize meeting of the Lennox and Addington Rifle Association was held at the ranges, Bath, on Thursday, 22nd inst., and two following days. The weather being very favourable a great number of marksmen were present. The match was opened by Lieut-Colonel Fairfield, who scored a "bulls eye."

The "All Comers" match, seven prizes, was competed for, which occupied the whole of the first day, with the following result:

	Pts.
Corp Hilton, 49th Batt.....	47
Lieut Strachan, 47th Batt.....	41
Sergt Bennett, 49th Batt.....	41
Pte J F Johnston, 14th Batt.....	40
Sergt Kincaid, 14th Batt.....	40
Sergt-Major Strachan, 47th Batt.....	39
Pte W Hume, 14th Batt.....	38

Ranges 200, 400 and 600 yards, five rounds at each range.

FRIDAY,

The second, third, and fourth matches were competed for, and the successful competitors were as follows:

NO. 2 MATCH.

Open to all members of the L. and A. R. A.

	Prizes	Pts.
Corp Hilton, 49th Batt.....	\$10	31
Dr Oronhyatekha,.....	8	31
Lieut Marshall, No. 2 G.T.R. ....	6	29
J Perry,.....	5	25
Sergt Bennett, 49th Batt.....	4	24
Capt Fairfield, 48th Batt.....	3	23

Ranges, 400 and 600 yards, five rounds each.

NO. 3 MATCH.

Open to all bona fide members of the L. and A. R. A., and actual residents of the country.

	Prizes	Pts.
Dr Oronhyatekha,.....	\$10	33
R McDonald,.....	9	33
Philip Amey,.....	8	29
Lieut Cox, 48th Batt.....	7	29
Surgeon Ross, 48th Batt.....	6	28
Capt F Booth, 48th Batt, (gold bugle charm. value),.....	5	26
Capt Fairfield, 48th Batt.....	4	26
Lieut Col Fairfield, 48th Batt... ..	3	25
Pte D Huffman, 48th Batt.....	2	24
Pte Ira Davison, 48th Batt.....	1	24

NO. 4, LADIES' MATCH.

Competed for by the officers of the Active Militia in the county who are bona fide members of the Association.

Prize—A field glass, valued at \$25, presented by the Ladies of Ernestown,  
Won by Captain F. Booth, 48th Batt, 22 points.

Range 400 yards. Seven rounds.

The aggregate prize, a beautiful "silver cup," valued at \$30, presented by F. W. Smith, Esq., jeweler of Nananee, to the Lennox and Addington Rifle Association, to be competed for annually. The highest aggregate score made by a member of the Association, and an actual resident of the county, in matches Nos. 2 and 3, to be the winner of the "Smith Cup," and to hold it until the second annual competition in 1875, was won by Dr. Oronhyatekha, who scored a total in these matches of 64 points.

SATURDAY.

The weather fine, but wind high from the right front,

NO. 5 MATCH.

Prizes presented by the inhabitants of Bath, competed for by actual members and residents of the county.

	Prizes	Pts.
Lieut Cox, 48th Batt.....	\$4	14
Surgeon Ross, 48th Batt.....	6	14
J R Perry,.....	4	14

Ranges 200 yards (standing.) Five rounds.

NO. 6, CONSULATION MATCH

made up on the ground for "unsuccessful competitors."

	Pts.
J. E. Sills.....	12
Lieut Mabce, 48th Batt.....	7
3rd, Major Cambell, 48th Batt.....	6

Ranges 200 yards. Five rounds.

Thus ended one of the most successful rifle meetings ever held in the Dominion, being the first competition of the Association.—*Caronicle and News.*

SPAIN AND CUBA.

The *Telegraph* thinks that "effect of the reported demand for a congress by the Chilian Government will be the signal, in all likelihood, for a new outburst of popular indignation in Spain at the non-suppression of the Cuban revolt. Fresh reinforcements will be demanded; larger grants in aid will be called for; and yet the Treasury of Madrid is empty, while the National armies are unable to make head against the Carlists for want of men. Of all the Governments which have ruled over the Peninsula since the deposition of Queen Isabella not one has ventured to face the contingency of having to surrender Cuba. Even Senor C stelar, in spite of his humanitarian policy, had to give in to the popular demand that the revolts should be put down by force of arms, and had to condone, if not to sanction, the measures to which the crew of the *Virginus* were sacrificed. It remains to be seen whether Marshal Serrano feels himself strong enough to confront an outcry which General Prim, and King Amadeus, and the President of the Federal Republic, alike shrank from meeting. If he fails to do so, the obstacle in the way of any effective resistance to the Carlists will be materially increased. With the utmost exertions, the Government of Madrid can barely keep the army of Don Carlos from advancing; and any fresh strain upon its exhausted energies may more than counter-balance the advantage derived from the recognition by the European Powers due to the initiative of Germany. Moreover, an apprehension that the loss of Cuba is imminent can hardly fail to alienate popular sympathy from the Government under which the catastrophe is likely to culminate. Altogether, the prospects of Spain are rendered more gloomy, if possible, by the news that the South American Republics think the time has come for intervention in the Affairs of Cuba."

The official report of the commission appointed to investigate the circumstances of the escape of M. Bazaine is made public. It implicates the jailors and states that they were instigated by Colonel Villotte, Bazaine's aide-de-camp, to facilitate the prisoner's flight, but acquits the garrison of the fort of complicity in the affair.

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The Volunteer Review,  
 AND  
 MILITARY AND NAVAL GAZETTE

"Unbribed, unbought, our swords we draw,  
 To guard the Monarch, fence the Law."

OTTAWA, TUESDAY, NOV. 3, 1874.

TO CORRESPONDENTS.—Letters addressed to either the Editor or Publisher, as well as communications intended for publication, must, invariably, be *pre-paid*. Correspondents will also bear in mind that one end of the envelope should be left open, and at the corner the words "Printer's copy" written and a two or five cent stamp (according to the weight of the communication) placed thereon will pay the postage.

✉ LIEUT. J. B. VINTSR, of Victoria, is our authorised Agent for Vancouver Island, British Columbia. As is also Captain H. V. EDMONDS for New Westminster and adjacent country.

The following article on the "Fish Torpedo" is from the *Naval and Military Gazette* of 2nd September.

"This curiosity is undergoing a series of experimental trials which it is much desired may prove more satisfactory than hitherto. Of all warlike inventions which this country has experimentalized upon this is the only one about which a real air of secrecy has been maintained. When carting the machine about it is usual to wrap up its tail in a sack, so that the mode of propulsion may not be detected, and though we cannot say how many foreign visitors may have been

treated to a peep, they are scarcely half a dozen of our own naval officers who may some day be called upon to use the engine who have yet been privileged to set eyes upon it. It is believed that this curious fish will be all in all to us when the time arrives for a struggle with some power. That while we expose every perfected weapon to the keen criticism and observation of those who may use the knowledge thus gained against us, we keep this doubtful and mistrusted weapon in the dark. There are some who think that the authorities have made so dear a purchase in giving £16,000 for this machine that they are almost loath to lay their bad bargain open to inspection. The possibility of projecting the torpedo from the submarine gun making the fish continue its course with accuracy has never yet been proved; but on the contrary, it has been found in previous experiments that instead of making a slight in a straight line in any desired direction from the ship's side the fish has been deflected on being shot into the water either by the ship's motion or by a want of initial velocity when leaving the muzzle of the tube. So that it will be seen that the discharge of a fish torpedo from one vessel of a squadron might have an excessively unpleasant effect for unless their weakness for choosing its own course cannot be overcome it is just possible that it might turn round and make tracks for one of the vessels in company with the torpedo ship instead of going at the enemy. Such a machine is evidently of doubtful advantage and unless it can be made to give up its present three courses—viz., either to take the enemy—to strike a friendly vessel—or to hit nothing—it is worse than useless. Under the supervision of the Naval Torpedo Committee now holding its sittings in Portsmouth Dockyard this matter is to be decided and the actuator has been fitted with the requisite engine and submarine air-gun to project the torpedo by compressed air. In the endeavour to remedy the erratic tendencies of the fish a moveable guard or shield has been fitted which can be dropped over the vessel's side in advance of the tube's outlet thus to give some cover to the torpedo when first entering the water."

The erratic tendency of the fish torpedo is due to another cause besides the "ship's motion" or want of initial velocity, the water itself whose resistance increases with the square of the velocity opposed to it would alone be sufficient to prevent the useful application of any machinery not operated directly by human intelligence. When English scientists can invent a helm operated by machinery to steer a ship without any human aid beyond that necessary to set it working, then the problem of the successful application of submarine torpedoes will be solved.

We have to acknowledge the receipt of the opening number (Vol. XLII., No. 2,218) of the new series of *The Naval and Military Gazette*, a journal unrivalled for the variety, literary and scientific value of the professional and other articles to be found in its pages; as well as for the steadiness with which it has adhered to the high toned principles on which its original inception was founded.

It affords us sincere pleasure to lay before

our readers its opening article in the issue of 2nd September (the first of the new series) especially as it is in direct accord with the principles which have governed the *VOLUNTEER REVIEW* since its establishment.

"When the *Naval and Military Gazette* made its appearance on the 9th of February 1833, as the first and only paper for the Services, its leading article contained the following language which we now employ, not merely as our own by tradition, but also as appropriately conveying the views which at the present moment we entertain.

"In regard to politics, the conductors of the *Naval and Military Gazette* desire it to be distinctly understood that they are not enlisted under the banner of any party.

"They acknowledge no party but their country. Whatever shall appear to them conducive to her glory, her interests and her welfare, no matter from what class of persons it may emanate, to that they shall feel bound at all times to give their humble but cordial support."

"Times have changed, and Service papers of more recent growth have flourished since these words were penned, but they are as applicable now as ever, and serve as a safe basis on which to form an idea of what such a paper ought and ought not to be. Being of no party in politics, neither must it be the blind partizan of any particular branch of the Service, nor of any class, whether of officers or men, at the risk of injustice to the rest—least of all should it bid for popularity by becoming a vehicle for frivolous complaints, or foster insubordination by studied attempts to raise a laugh at the expense of superior authority. Our ideal is a paper owned, written, and conducted for the United Services, by officers of these Services; opening its columns to all who write in a fair spirit, and holding their names invariably confidential, laboring for the redress of grievances without timidity and without bluster, noting all advances in naval and military science, and the literature bearing thereon, at home and abroad; discussing the great questions of national defence, as well as advocating personal rights; and circulating intelligence between all the British and Colonial Forces throughout the world. This ideal we have determined fully to realize, and the amount of encouragement which we have received makes us confident of success. In the words of our first number, from which we have already quoted, we come forward, "not as strangers to the United Services, but as partners to their fortunes, fame, and feelings, and habitual advocates of their interests and honorable distinction. We are not of a class or a character to lend ourselves to merely mercenary speculations. We are both disinclined, and feel it to be unnecessary, to trouble the Services with professions which we will leave to be inferred from our practice. We are of them and with them—a guarantee at least for our zeal; of our means and competence to fulfil the task we have undertaken, it will be for them to judge."

"The torch thus lighted more than forty-one years ago, has never been extinguished, although at times it has feebly flickered. We have undertaken the duty of fanning the flame and bearing it onward with a steadier and firmer step. To the Services are our sympathies and efforts devoted, and to our brethren in the Services, we look for counsel, co-operation and support."

"The second experimental attack upon the double bottom of the iron paddler steamer *Oberon* took place on Friday last week, off the east end of Stokes Bay, near Portsmouth, under the supervision of the War Office *Oberon* Committee, presided over by Sir William F. Drummond Jervois, K.C. M.G., C.B., Royal Engineers. The *Oberon* was built at Deptford, as far back as 1841, and structurally, therefore, she must be a weak, as well as an old vessel. For these experiments a double bottom has been given her. The outer skin plates now cover the cellular spaces built upon the old bottom of the ship to represent the bottom of an ironclad being of 13-16ths and 7/8 inch plates. The bottom of the *Oberon*, thus prepared, is supposed to represent the bottom of Her Majesty's ship *Hercules* in strength. This being premised, the results to be obtained by firing submarine mines at decreasing horizontal distances from the *Oberon's* bottom, will furnish to the torpedo committees valuable data relative to fixed distances from which sunken mines can be exploded with certain effect upon the double bottoms of ironclad ships. At present the *Oberon* Committee appear to be confining their experiments within those limits, but as they proceed the "fish" or other forms of moving torpedo may possibly be employed. At the previous experimental attack upon the *Oberon* (4th inst.) a charge of 500 pounds of compressed Waltham Abbey gun cotton, in 9oz. discs, saturated with fresh water, and primed with about one pound of dry cotton in a water-proof bag, was sunk at a distance of 100ft. horizontally from the *Oberon*, in a water-tight iron case, in 43 feet depth of water, at the time of explosion, about slack tide. The firing wire from the priming charge to the shore at Fort Monkton, a distance of about 800 yards. The mine was exploded, and, as Sir William Jervois had anticipated, without damage to the *Oberon*, or to the condenser on board. The ship, had, of course been lifted up by the explosion of the mine, and loose things on board generally shook up. Two lumps on board sustained no injury. An examination of the vessel in dock the day after the experiment proved that the double bottom under water was also entirely uninjured.

"The experiment last week was arranged to be a repetition of the first experiment in all particulars, except in the distance of the mine from the *Oberon*, which was 80 feet horizontally from the vessel instead of 100ft. as before. There were, however, two other alterations in the conditions which must be noticed. The *Oberon* was now moored a little further off the edge of the shoal than on the previous trial, and the mine was exploded in a depth of water of about 52ft. instead of 43ft., as on the previous occasion. The other alteration was that the gun cotton was saturated with fresh water to the extent of 1 1/2 per cent. above the amount of saturation on the first trial.

The president and members of the *Oberon* Committee, comprising Colonel Sir F. W. D. Jervois, R.E., Captain Singer, R.N., Lieut.-Colonel Stothard, R.E., Lieutenant W. H. Hall, R.N., Mr. Abel, chemist to the War Department, and Lieutenant J. Townsend Bu. knoll, R.E., secretary, left Southsea and Portsmouth Harbour about two p.m. in the Royal Engineer steam launch and the *Excellent's* steam cutter for the *Oberon*, which lay moored in her old position off Fort Monkton, at the east end of Stokes Bay. Other steam and gun vessels followed with members of the Naval Torpedo Committee, naval and military officers, War Office ticket holders, &c., and soon there

was a goodly ring of vessels assembled round the *Oberon*, but at respectful distances.

"High water slack, soon after three p.m., had been selected as the best tide for making the experiment, and fairly punctual to the time the mine was fired by the Engineer officer ashore. An immense fountain-like body of water and black mud rose into the air to a height estimated variously from 150 feet to 200ft., which in falling again flooded the *Oberon's* deck. It exceeded threefold the column of water and mud thrown up in the last experiment; but here there was a greater fresh water saturation of the 500lb. gun cotton forming the charge of the mine, and the latter had also a greater head of water over it than the previous mine had. The *Oberon* still floated, however, without any visible injury to the exterior of her hull, and on examination it was found that no injury whatever had been done to the sides of the vessel, to the condenser, or its tubes. The loose things on board as on the previous occasion, were generally shaken out of their places, and the old and rotten wooden planking of the decks in one or two places was started; but this was the extent of damages discoverable even in this direction. It is, however, impossible to say whether the double bottom of the *Oberon*, representing the double bottom of the *Hercules*, had suffered any damage or not by the explosion until she had been examined in dock, for which purpose she was at once towed away into Portsmouth Harbor.

"The War Office programme of the experiments gives the subjoined figures:— "Weight of *Oberon's* hull before the outer skin and frames were added to represent *Hercules* double bottom, 590 tons. Present weight 925 tons. Weight of condenser, slinging cable to hull, &c., 30 tons. Forty-four crusher gauges are fitted to the starboard side of the ship, the side attached. Over each side of the vessel there are also suspended by 3-inch ropes, 12ft. long, 18-pounder round shot, each shot having a crusher gauge, but with a piston of smaller weight than the other gauges. The weather, a light wind and smooth water, was very favorable. The next experiment will most probably be made some time during next week."

These experiments on the *Oberon* (an account of which we copy from *Broad Arrow* of August the 29th) is a decisive proof of the fallacy of attempting to use the torpedo as an effective weapon of warfare. A very trifling amount of time spent in calculating the expansion of the gases (which in the real explosive force in gunpowder, gun cotton, glycerine, dynamite, or any of the fulminates) would show that the resistance offered by water being equal on all sides but capable of accumulating laterally as the out of the force employed would compel the energy of the charge to be expended upwards in the line of least resistance and that except it was exploded directly under the hull of the vessel it could do no positive damage. Until the operators can place the torpedoes so that a vessel must pass over them and then that they shall be able to explode them on the instant, their use as weapon of offence or defence is more than doubtful. The *United States Army and Navy Journal* speaks of the above experiments.

"The second series of experiments to test the effect of distance on the results of the explosion of electrical mines (or as some call them, stationary torpedoes—practically the same as Major Abbot of the Engineers has been constructing at Willet's Point), has been completed in England. At the first trial the *Oberon* was placed with 100 feet of water intervening between her and the mine, which was charged with 500lb. of gun cotton, equal to about a ton of gunpowder, and the result was that the vessel, so far from being blown to atoms, was comparatively unharmed, and if she had been an enemy's attempting the entrance to a harbor, she could have entered it in spite of the explosion of the torpedo. At the second experiment a similar torpedo similarly charged was used, but the distance to the *Oberon* was reduced to 80 feet; and the results were to all intents the same. As the *London Engineer* remarks, they differed only in degree rather than in character from those obtained at the long distance. The vessel was much shaken, and everything that was not firmly fixed was violently dislodged from its position. Still the *Oberon*, if a hostile vessel, could have gone on in spite of the disturbance. There was some leaking but it was afterwards discovered, on examination, that it was due to the injury effected on some ballast tanks from which the water poured out. At the next experiment the distance will be reduced to 60 feet. Whenever the result of this—and it may be the disablement of the vessel—the experiments show, what we contended in our strictures on Major Abbot's mines, that their power as offensive weapons has been greatly exaggerated. So many elements besides distance enter the problem of their action that it is not safe to rely on them for the defence of important harbors. Electrical mines fired by an observer on shore, even with the aid of guns mounted in fortifications, are by no means a sure defence for harbors. They will not protect a deep harbor against a first-class modern ironclad fleet. The experiments with the *Oberon* indicate that a vessel might be provided with outriggers or other appliance, that would sweep away the mines within sufficient distance to allow the ironclad to pass with safety. The torpedo question it will therefore be seen, is by no means solved by these anchored magazines."

"Last winter the announcement was made in England that all the soldiers of the war of 1812 were to be pensioned by the Imperial Government. In accordance with the announcement, the veterans of the Colonial Militia who served with the Imperial troops made application for the pension through the Dominion Government, but informed, as we stated some time ago, that the pension would be given only to soldiers in the regular army. The Government of the Dominion have been considering the matter, and have determined to ask Parliament for such an amount as will give a small pension to the survivors of the grand old veterans who, as part of the Provincial forces, lined the frontier of British America, and maintained their country's independence. They well earned this in their declining years, and will not have reason to feel hurt that the regular soldiery were pensioned, while they were left to suffer from neglect."

The foregoing paragraph from the *Ottawa Times* of 19th October, must be particularly gratifying to the people of Canada. There



are yet amongst the survivors men, like ex-Judge Jarvis, of Cornwall, who have stood beside Brock on the heights of Queenstown on that memorable October morning, sixty one years ago, when the yoomen of Upper Canada clad in home-spun, asserted their right to the name of freemen to the bestowal of their allegiance and to the respect of their neighbors by repelling an unjust as well as uncalled for aggression, and vindicate the rights of British freemen to uphold British supremacy on this Continent, proving in the act that they did not need the assistance of trained soldiers to defend their altars and their honours.

In recognition of such services the Ministry have earned the thanks of all well wishers of their country. It was right and just that they should recognize even at the eleventh hour claims which should have been acknowledged by the Mother Country half a century ago. It is just, as well as magnanimous, and we believe the majority of the veterans are men who do not require much pecuniary aid to close memorable and useful lives in comfort. We would suggest that a distribution amongst them of some of those orders that have been created for the purpose (ostensibly) of rewarding Colonial valor and merit would be both fitting and appropriate testimonials on the part of the Mother Country to devotion and valor unequalled in her history. British economists may save a trifle at the expense of British justice and generosity, but at least the orders designed to reward Colonial Services should sparkle on the breasts that vindicated British honor. We can safely leave even this matter to a Government who has so generously and justly appreciated the services of the veterans of 1812.

We this week publish on our Second Advertising page, "The Leonard Scott Publishing Company's" Prospectus of the Reprints of the British Periodicals for 1875—to which we direct the special attention of our readers. These Periodicals ought to have a wide circulation in the Dominion of Canada, being the very best literary publications in the world.

The Bessemer saloon steamship was expected to leave Hull, in a complete state, so to be placed on the Channel service, probably as soon as the middle of September, in connection either with the London, Chatham, and Dover, or the South-Eastern line. Should she fulfil the expectations of her builders, it is thought her ultimate route will be from Newhaven to Dieppe or Southampton to Havre.

The slave trade is still rife on the coast of Zanzibar. H.B.M.'s ship *Thetis* has captured two dhows, one with 95 slaves on board, besides her crew and a number of Arab slave dealers, the latter having been all sent to prison. The second dhow had only eleven slaves on board, the boat of the *Thetis* having come upon her while in the act of embarking her cargo.

## MARRIED.

On Monday, the 12th October, at the residence of the bride's father, Chichester, P.Q., by the Rev. A. C. Sedgwick, M.A., Rector of Pembroke, Charles V. F. 1844, Esq., Secretary to the Minister of Customs, second son of the late Rev. Charles Buss of Ottawa, to Mary Letitia, youngest daughter of Major George H. Perry, Editor, VOLUNTEER REVIEW.

## CORRESPONDENCE.

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

## "IMPORTANT PIECE OF NEWS."

To the Editor of the VOLUNTEER REVIEW.

DEAR SIR,—I was quite astonished on receipt of the last number of your paper, to read your article or editorial, offering Col. SEARTE thanks for an "important piece of news" (?)—regarding the discontinuance of the "Scarlet Jacket." Now I will inform you that on reference to the August Army List this "important piece of news" will be found amongst the Orders of H.R.H. the Field Marshal, Commanding in Chief, and that the officers of our regiment, at their meeting held here, on 29th September last (nearly a month ahead of your "important piece of news," appearing), were informed of this "important piece of news," but we decided to continue wearing them, more especially as our new officers have all obtained them, and it would put them to too much expense to change at present.

I will now really give you an "important piece of news," which I quote from the *Army and Navy Gazette* of 10th Oct. inst., and that is this (which perhaps no one in this country but the recipients of the paper are as yet aware of): "The Rifle Exercises and Musketry Instructions have been revised, and the new regulation will be issued immediately. At least so a General Order says. We wonders what the revision will consist? No official work stands more in need of revision perhaps, than the musketry regulations, but if any are hoping to find the work simplified we fear they will be sadly disappointed."

This I consider an "important piece of news," which, perhaps, our authorities are not yet aware of, and I trust that our forces will not be behind the age in having the "new regulations" served out to them, as soon as issued.

Can you inform us in what the revision will consist of?

Your obedient servant,  
IXTON.

Montreal, October 24th, 1874.

P.S.—Do the "mounted officers" (adjutants included) know they are entitled to wear the "Sabretache" when mounted? Perhaps this is another "important piece of news" for some of our "Army." I would advise all mounted officers to obtain it, for it is handy on parade or in the field, as I have myself have found it.

## FROM OUR OWN CORRESPONDENT.

Montreal, 20th October, 1874.

A very large crowd of spectators were reminded of the old garrison days of the "Chump de Mars" on Saturday last, the 24th instant, by the parade for inspection of that old and popular regiment the Prince of Wales V. Rifles, under the command of Lieut. Colonel F. Bond, Colonel Fletcher, C.M.G., the D. A. General of the District, accompanied by Lieut. Colonel Bacon, B. Major, and three officers of his staff, were received with the usual honors, and the inspecting officer then proceeded to make a most minute inspection of the corps, after which the march past was executed in a manner most creditable to their drill and discipline, the manual and firing exercises as well as several battalion movements were steadily performed, Colonel Bond proving himself quite up to his duty as commanding officer of this really crack rifle battalion, in which he is ably seconded by his officers and non commissioned officers. At the conclusion of the parade, Colonel Fletcher in a brief but expressive address conveyed to Colonel Bond and the officers his great satisfaction of the smart, soldierly, and fine appearance made on this occasion by the Prince of Wales' Rifles, reminding them that he had once the honour of being a member of the same and trusting that their motto, "nullus secundus" would ever be kept in view.

The Victoria Rifles, or as they are familiarly called the "Vics" are to be inspected on the 31st inst., and will doubtless keep up their old reputation, as a generous rivalry exists between them and the Prince of Wales Rifles, which is doubtless beneficial in many points of view. The 6th, the only red coated corps in the city with the exception of the Engineers, are to be inspected at an early date, as well as the Garrison Artillery and the Montreal Cavalry Troop. This latter corps is virtually under the command of Major Muir, though that officer's resignation has been sent in a long time past, but not yet officially gazetted, in the meantime Lieut. Pees is acting as Captain, attending all drills, without holding his long promised rank.

The Drill Shed is still unroofed, and there seems little chance of its being again available for our city corps, who in consequence suffer considerable inconvenience.

Mr. Marton, gunsmith, of this city, and a relative of the famous "Joe Marton," is taking out a patent for a new breech loading rifle which is highly spoken of.

The funeral of Major Robinson, formerly of the Prince of Wales Rifles, was attended by Colonel Dyde, and a number of his old brother officers and friends. His death was very sudden.

The French War Minister has just decided that Generals of Division may accord authorisation to marry to young men incriminated for service, but whose class has not been called "into activity."

THE ESCAPE OF BAZAINE.

The following is the full text of a letter addressed by Mmo. Bazaine, from Spa, to the French Minister of the Interior:

On my arrival here I find by the newspapers that there have been several arrests in consequence of the Marshal's escape. It had previously been my intention to write to you on the matter, and it is now become my duty. Seek for no accomplices, for there are none. My nephew M. Alvarez de Rull, and I are those who effected everything. On seeing that no alteration would be made in the treatment of the captive Marshal, and that his life threatened to be shortened, I determined to persuade him to escape. I accordingly begged my nephew to help me, which his independent position enabled him to do, and we pledged each other to do everything ourselves in order to compromise nobody. I now communicate to you the exact details of what occurred, hoping to clear up the truth and to prevent innocent persons from languishing any longer in dungeons. I left Spa on the 29th of July, accompanied by my nephew, whose devotion has stood every test: We repaired to Genoa, where we arrived on the 5th of August. On Tuesday, the 6th, we went to the Perrano Danovaro Company for the purpose of hiring a pleasure steamer, under the pretext of wishing to make a trip in the Mediterranean and on condition that the vessel should be entirely at our disposal. About five in the morning of Saturday, the 8th, we left Genoa harbour, and arrived in course of the morning at Port Maurice, where the bad weather forced us to stop the night. On the next day, the 9th, we went to San Reno and spent the day there. About eight we directed the captain to proceed to Jouan Bay, telling him we wished to fetch a man servant from a villa situated on the coast, for the captain knew nothing of our plans. The Marshal had been informed by words I had written in my letters with sympathetic ink that he was to make preparations to leave the island by night, immediately after the arrival of a steamer in Jouan Bay. The captain, wishing to proceed in order to have his papers inspected at Jouan Bay, asked us whether and at what hour we would start. We told him we were going to a villa in the neighbourhood to fetch a man servant, and, perhaps, also a maid servant, and should then towards night turn back to Nice. We left the ship in one of its boats about half past seven, and landed in the neighbourhood of La Croisette, in order not to compromise the crew of the ship. We went thence to La Croisette, where we hired a boat for a trip on the sea. The sea was very rough. Neither of us hardly knew how to row, so that we did not reach the foot of the fort opposite Jouan till between half past nine and ten. We there saw the Marshal descending by a rope, and to give him a sign where the boat was we lighted a match. The Marshal immediately answered by lighting a match to direct us to the spot where he had climbed down. A little later he jumped into the sea in order to reach the boat. My nephew had to assist him into it, for he had received contusions, and his strength was exhausted. All three of us then tried to reach the steamer, which was to wait for us at the spot where we had left it. With much difficulty we found it, went on board, and left one of the sailors to take the boat back to the coast. As soon as we were on board my nephew and I directed the captain, it being already one A.M., to start immediately for Genoa, where we landed on the 10th August, about

eleven A.M. This, sir, is the truth, and I have the honor to salute you.

M. Bazaine, in his letter to the French Minister of the Interior, dated Cologne, August 17, gives the following particulars of his escape:

Monsieur Marchi (of whose conduct towards me in spite of his delicate mission I have nothing but good to say) remained with me till nearly 10 o'clock at night. I was on leaving him and, after bidding good-bye to Colonel Villotte, whose departure had been fixed several days previously for the 10th, instead of going into my room I succeeded in evading the eyes of the guard who came to shut my door, and must have been persuaded that I had returned to my room. I was painfully wounded to find applied to me the rule of May 25, 1872, respecting central prison houses. I found myself deprived of the privilege of taking exercise otherwise than in a small confined space, exposed all day to the burning sun of the south. I expected to be left only under the guard of the military commander of the fort. Had I not been submitted to a humiliating regime, from which my prisoner ought to have saved me, and which worse than death to me, I should have done as I did at Versailles and Trianon, and should not have attempted to escape, out of respect for the military uniform that I have honorably worn for nearly half a century. Finally, I felt myself authorized to act as I did, because that maxim of public law that "no sentence is legal unless pronounced by the peers of the accused," a maxim respected even in the midst of the anarchy and violence of the middle ages, was not respected for your servant.

MARSHAL BAZAINE.

RUSSIA ON THE BLACK SEA.

Several of the Russian papers publish long articles on the occasion of the hundredth anniversary of the first recognition of the right of Russia to navigate the Black Sea under her own flag, by the Treaty of Koulouk-Kinaradj, concluded in July, 1774. "Up to a hundred years ago," says the *Goless*, "Russian ships were only allowed to enter the Black Sea from the Sea of Azoff, under the Turkish flag; since then the Russian and Turkish flags alone have been admitted on the Black Sea. While the power of Russia very soon extended to the whole of the northern and eastern shores of that sea, she did not find the means, nor has she found them to this day, of correspondingly developing her maritime trade. On the other hand, she laboured with the more energy and success in creating a fleet, and the Black Sea has, until the most recent times, been the principal school for her seamen. The glorious day of Sinope in the Crimean war, when our fleet was engaged with its Turkish neighbour, strengthened by English and French ships (sic) was followed by the catastrophe of Sebastopol; in order to block up the entrances of the harbour, the greater part of our fleet—the pride and hope of our country, which had taken seventy years to build—was sunk in the waves. Only a few small ships were left. The Treaty of Paris of 1856 deprived the Russian Empire even of the right to maintain a fleet in the Black Sea; a pair of schooners were left for coast duty, and nothing more. When, in 1870, the Prussians stood before Paris, the well known circular note, prepared on the suggestion of Prince Bismark, was issued, declaring that the Czar could no longer be

bound by the provisions of 1856 with regard to the Black Sea. All the world was silent, and the chains with which we were attached to the coasts of the Black Sea fell to the ground." The writer adds that the moment selected for the declaration was an eminently favourable one, as the old wooden ships were just at that time being superseded by iron clads. "Now that Nicolief has been completely equipped as a great naval store house and arsenal, the construction of new ships is proceeding pretty rapidly, though as yet the Black Sea fleet only comprises two iron clad corvettes, five screw corvettes, two yachts, and a few gunboats. The Russian Merchant navy on the Black Sea is in a very backward condition. The merchant ships which existed before the Crimean war were chiefly constructed for coast navigation, and were nearly all destroyed by the enemy. Moreover, the inhabitants of the shores of the Black Sea do not like sailing, and have no mercantile instincts.

The Government has certainly succeeded, though with great difficulty, in attracting a pretty considerable number of colonists of various nationalities to the country, but these have not improved the Russian carrying trade sufficiently to enable the Russian merchants to dispense with foreign ships. So far, indeed, is this from being the case that foreign ships are almost exclusively used for the purpose. After the destruction of the fleet and the annihilation of the beginnings of a merchant navy in the Crimean war, a "Russian Society for Navigation and Commerce," supported by the State, was formed at Odessa. This society opened a direct communication with the harbors of Southern and Western Europe, and recently made an attempt, though with but little success, to enter into communication with Eastern Asia through the Suez Canal; but it is not alone capable of giving any considerable development either to commerce or the carrying trade, and it stifles other undertakings of a similar kind by its monopoly."

The Vendome Column is now restored, the last stone have been placed. One thing only is now wanting; the crowning of it. The *Gaulois* remarks that the law voted by the National Assembly, after the act of vandalism committed by Courbet, said, "The Vendome Column shall be reconstructed as it was before." The text is formal, and admits of no error or false interpretation. When the column fell it was surmounted with a statue of Napoleon I. in the costume of a Roman emperor, and wearing a crown laurel. The government is, however, said to intend to place on the summit—provisionally it is true—a tricolor flag.

A monument commemorating the New Zealand war of 1863-4 has been placed in the grounds of Greenwich Hospital, just opposite the Ship Hotel. It is in memory of those men of the British vessels *Curacoa*, *Miranda*, *Harrier*, *Esk* and *Eclipse*, who fell in the war. In the centre are the words, "New Zealand," and on the four sides inscriptions of the names and rank of the deceased. The monument is erected by the survivors.

In the last thirteen years sums amounting to £6,775,000 have been raised for fortifications in the United Kingdom. The repayment is to be by annuities amounting in the whole to £510,542, payable until the year 1885. They are calculated on the terms of repaying the principal with 3 1/4 per cent. interest.

## THE ARKANSAS CONTEST.

It will be seen by the following verses that the present contest between the Brook and Baxter parties is not the first memorable conflict that has occurred in Arkansas:

There was a man in Arkansas  
As hot his passions rise,  
And not unfrequently peked out  
Some other varmint's eyes.

His name was Tuscaloosa Sam,  
And often he would say;  
"There's not a cuss in Arkansas  
I can't whip any day."

One day a stranger, passin' by,  
Heard Sammy talking so,  
When down he scrambled from his horse,  
And off his coat did go.

He korter kinder shut one eye,  
And split into his hand,  
And put his ugly hoed one side,  
And twitched his trouser's band.

"My boy," says he, "it's my belief,  
Whomever you may be,  
That I can make you screech and smell,  
Portikler agony."

"I'm thar," says Tuscaloosa Sam,  
And chucked his coat away;  
"I'm thar," says he, and then he up  
For to commence the play."

He thundered on the stranger's mug—  
The stranger pounded ho,  
And oh! the way them critter's fit,  
Was singular to see!

They clucked like two rampajous bars,  
And each fell on his sit.  
They swore a stream of six-fish oaths,  
And fit, and fit, and fit.

And Sam would try to work away,  
And on his pegs to sit.  
The stranger pulled him back: and so  
They fit, and fit, and fit.

The stranger snapped at Sammy's nose,  
And shortened it a bit,  
And then they both swore awful hard,  
And fit, and fit, and fit.

The mud it flew, the sky grew dark.  
And all the Hensins lit;  
But still them critters rolled about,  
And fit, and fit, and fit!

First Sam on top, then t'other chap.  
When one would make a hit,  
The other'd smell the grass; and so  
They fit, and fit, and fit!!!

The night came on, the stars shone out.  
As bright as wimmen's wit;  
And still them feters swore and gouged,  
And fit, and fit, and fit!

The neighbors heard the war they made,  
And thought an earthquake'd hit;  
Yet all the while 'twas him and Sam,  
As fit, and fit, and fit!

For miles around the noise was heard—  
Folks couldn't sleep a bit,  
Because them two rantankerous etaps  
Still fit, and fit, and fit!

But just at cock-crow, suddonly,  
There came an awful pause,  
And no and my old man run out  
To ascertain the cause.

The sun was risin' in the yeast  
And lit the hull concern,  
But not a sign of either chap  
Was found at any turn.

Yes! in the region where they fit,  
Were found to our surpris,  
Two quars of butters, two big knives,  
Some whiskers and four eyes.

It is said that Count Armin Bortzenburg, President of the district of Lorraine, has sent in his resignation to Berlin.

General Rada has been appointed to the command of the Central Carlist army in place of Don Alphonso.

Count Von Arnim's civil suit has been rejected by the Metropolitan Court of this city, but referred to the court of the second instance.

The *Daily News* says the Ultramontano members of the Reichstag have resolved to question Bismarck concerning his treatment of Count Von Arnim.

The Carlist Chiefs, Logana and Furten, have been arrested while passing through Cordova in disguise; probably Logana will be summarily executed at the depot where he recently ordered the shooting of several

## ARMY CONTROL.

BY MAJOR GENERAL D. LYONS

(From *Blackwood's Magazine* for October.)

The organization of the administrative departments of the army is a subject on which, as on all others, there are a vast number of opinions more or less at variance with each other.

The diversity of opinion arises chiefly from the subject being contemplated under different influences and from different points of view.

In order to appreciate correctly the value of the opinions expressed, it appears to me necessary to analyse some of the causes or influences which have led to their conception.

The influence which has led to the strongest antagonism of opinion on this subject is the struggle for supremacy in the government of the army between the military and civil authorities connected with it.

For the last forty years the struggle has gradually, and at times almost imperceptibly, been creeping on, which has at length placed the government of the army immediately under the control of the House of Commons, with the Secretary of State for War, a civilian, at its head, and a numerous retinue of civil clerks of great influence and power around him.

I do not undertake to say whether this is right or wrong, but we are only uselessly beating the wind if we argue on this subject of control without first acknowledging the fact, and looking our real difficulty in the face.

The next cause of diversity in opinion arises from the different sources whence military men who write and speak on the control question have derived the information which has caused them to form their opinions.

These influences or points of view must be well considered in weighing the value of each opinion.

It is scarcely possible for a civilian fully to understand the system of carrying out strategical operations before an enemy; and without that knowledge, however clever he may be on other subjects, he cannot form a correct idea of the laws which should regulate the different departments which constitute the vast and intricate machinery of an army placed under the command of a general in the field.

The most elaborate and forcible arguments set forth by military men in time of peace emanate frequently from men extremely clever, remarkably scientific, and unanswerable in theory, but often entirely deficient in practical knowledge and experience may lack the ability of advocating his opinions by powerful writing and speaking.

Having had some experience in the field on active service, as well as in our peace manoeuvres, and having spent many years in constant contact with British soldiers, I think the opinion I have formed of the present organization of the control department may be of some use, and should it not point out the "fairway channel" it may at any rate warn our pilots of the rocks ahead.

In our present system, large departments have been created in the War Office, principally under the superintendence of civilians who have been placed in high positions, with high pay, which they naturally will be loath to relinquish. In order that their hold upon the army may be more complete controllers have been placed at every sta-

tion, who communicate constantly and directly with them. These controllers have been made independent staff officers; they communicate only with their general officers, and take their authorities and instructions direct from him in person. They have also been placed in direct communication with officers and soldiers, and have been intrusted with the greater portion of the duties formerly in the hands of the quartermaster general, the remainder of whose duties have been thrust upon the general officer—little more than the name of the office remaining.

In time of peace the great defects of this system may show themselves only in the shape of friction and occasional complaint; but in the event of war, the whole fabric must inevitably fall.

The operations of war may be divided under two heads.

First, The strategical and tactical movements of an army, by which the objects of a war are to be attained.

Second, The administrative duties, whereby the troops are clothed, fed, and supplied with ammunitions of war.

All the plans of operations included under the first head can alone be considered, formed, and carried out by military men. In the more delicate details of such plans, a general can scarcely allow his right hand to know what his left hand is doing; it would be unnecessary and unsafe for him to entrust the secrets connected with them to a man acquainted with military science, who could not appreciate their value.

On the other hand, a civil officer intrusted with the charge of the administrative departments of an army, could never find time to be constantly at the elbow of his general while he was studying and preparing the details of his military plans.

As the strategical and tactical operations included under the first head must be left exclusively under the direction of military or combatant officers, so must the duties included under the second be dealt with by officers especially appointed and educated for those branches.

As a military staff officer has access to his general at all times, to refer to him on matters relating to strategical or tactical movements, so do I consider the head of an administrative department should have free access to him to speak on subjects relating to his own branch of duty.

So far the distinction between the duties included under the two heads is clear and simple; and were it possible to keep them separate, no difficulties would arise, and the heads of administrative departments might be considered independent; but unfortunately this is not possible—the system breaks down on the very threshold.

The duties of the military and administrative departments are so closely interwoven that the one cannot be separated from the other. The very moment a camp is formed or a force is assembled, they come into collision; and the latter must, at every turn, be dependent on and subservient to the former. The position of the camps—the spots on which provisions, forage, and stores are to be placed—the amount of provisions or transport that can be derived from the country round—the very spot on which the controller himself is to be placed—must all be decided by military staff officers, with reference to strategical views and purposes.

It must be remembered that during a campaign the reconnaissance of country and the duties of the intelligence department must be carried out by military staff officers.

thoroughly instructed in military science. These cannot be performed by the control department, which has no officers trained or qualified for the work.

Consequently, the roads by which the columns of baggage, provisions, and stores are to travel, and the hours at which they are to start, and many other details affecting them, must be arranged by military officers with reference to the movements of the troops; and, even when arranged, they are subject to alteration, owing to occurrence which may happen in time of war. A sudden attack may choke up a road, a bridge may be destroyed at the last moment; a swampy road may become impassible, or a thousand other incidents may occur to cause delay, any of which may render a change of arrangement in the movements of both troops and columns of waggons necessary.

These changes must be made on the spot by military staff officers, and must frequently be made without reference to the general commanding. If a control officer was to attempt to change such arrangements without reference to military authority, he might obstruct the advance of reserves moving to support an attack, or interfere in some other way with the movements of the troops, and cause a serious disaster.

Nor is it in front of an army alone that it is necessary that all movements, whether of troops or of columns of waggons, should be subject to military arrangement, but also in rear.

The task of keeping open and protecting the communications of an army is always a matter of vital importance, and is frequently attended with difficulty and danger, which can only be dealt with by a military officer of experience on the spot; and in such a case it would be impossible to make reference to the general commanding at every step, and wait for his instructions, to be filtered through his controller till they dribbled down to the commissary in charge of the transport. The very idea is simply ludicrous.

These are merely possible incidents taken at random, but similar cases must arise continually on service, whether an army is advancing, retiring, or stationary, and in all cases the arrangements made to meet them must have reference to strategical and tactical considerations.

The object of a campaign is military, and all other considerations must be made subservient to that first consideration. We do not fight the enemy in order that we may be able to feed and clothe our troops in order that they may be able to fight the enemy.

The head of an administrative department of the army cannot be independent of the military staff, nor can he be a staff officer in the same sense as the head of a military department; he must be *departmental*, and dependent on those who have the direction of the strategic and tactical movements of the army, which must necessarily be of the first importance in war.

To suppose that a general officer can give his instructions to the heads of his military and administrative departments, to be carried out independently, as it were, in two parallel lines, and that the military officers, who are frequently forced to use discretionary power according to the operations of the enemy, are never to interfere with the movements of the administrative branches except through the general, is absurd.

Moreover, a civil officer unacquainted with military science would require different and more detailed orders than the head of

a military department; and the valuable time of a general would be uselessly taken up in explaining details which an officer of the quartermaster general's department could explain equally well.

This is not a mere matter of person or class feeling—a question whether it is or is not beneath the dignity of the head of an administrative branch of the army to take orders or instructions from a staff officer—but it is a vital question, which affects the practical working of the machinery of an army.

I consider that, with regard to such general departmental questions as the following, the controller should receive his instructions from the general commanding in person, without the intervention of any staff officer.

1. The probable duration of a campaign.
2. The probable nature of a campaign.
3. The probable amount of provisions and stores that would be required from home.
4. The source whence transport animals are to be procured, and the means of getting them to the scene of action.
5. Matters relating to the receipt and payment of money.
6. The positions of the main depots of provisions and stores.

Also, in the interior management of his department he should be independent, but in all cases where the operations of the army are in any way concerned, he and his department must act departmentally, and be dependent on, and subservient to, the main objects of the war, which are to be effected by strategic and tactical movements under the direction of military officers.

In the foregoing pages I have alluded only to an army in the field. In time of peace, the present system of making the controller an independent staff officer leads only to a little discontent and friction, and to an occasional blunder; it has to outward appearance no very serious influence over the army. But ought we not, in time of peace, to devise a system which will work in time of war? Let us not slumber in our false security, nor be deceived by the superficial arguments of those who seek only the aggrandisement of their class, little knowing the mischief they are preparing for their country in the event of war. When the tocsin sounds, it is to late to reform.

Where is the use of our peace manoeuvres, our studies, our exercises, if our organization is false, our system unstable, and doomed to fall before the crucial test of practice, when jealousy and strife for power must yield to the stern necessities of war?

I will now pass to the organization of the vast administrative department styled "CONTROL."

It appears to me that in the great anxiety to diminish the number of departments, more have been brought together than any one human mind can master; and I do not think it possible that any controller could properly supervise them all, nor give his general correct and detailed information respecting the numerous matters that are now placed under his direction. He would be forced to send for the commissaries in charge of each particular section to furnish the information required: this is virtually a disruption, and a return to the old departmental system under a new title.

I think that all warlike stores, including arms, ammunition, siege-train stores &c., &c., should be placed in a separate department.

I have heard it proposed also to place camp equipments, as formerly, in the same department, and leave transport and supply alone in the control. I think the advantage of this arrangement is doubtful, as camp equipment takes the place of barracks is connected with the personal comfort of the soldier, and is of a very different nature from warlike stores.

Having made the administrative branch of an army *departmental*, in all cases where it comes in contact with military considerations, and separated the warlike stores from the present unwieldy mass, the next great question to solve is the arrangement of the transport department—and various are the opinions on this subject. It is, in fact, fraught with great difficulties.

If, on the one side, it was made an independent military corps, it would require a fresh set of internal departments to furnish it with horses, waggons, forage, &c.; or it would be obliged to depend on the control department to do these services for it. There is, moreover, great danger of their becoming too much like cavalry, and of difficulties and friction arising in the performance of their duties connected with the control and store departments.

On the other hand, officers of the control department are not much versed in matters of discipline, and their other duties do not adapt them for the command of men.

Taking all all things into consideration, I am inclined to think that, as the control department must be responsible for the supplies of the army, and that the main object of the transport corps is to convey these supplies and control stores, it should not be separated from that department, but be considered part and parcel of it. I consider that officers should be especially appointed from the army, and trained for that corps, and not be transferable to other branches of the control, and that the officer at the head of the transport corps should be responsible for the discipline of his corps; but I do not think it would be advisable to make him independent of the controller. I am aware that there is a little difficulty in this arrangement, but I do not think it is insurmountable; any other system would endanger the efficiency of the supply branches, for whom the transport corps is principally intended to work.

The next consideration is whether the same transport corps in time of war should work for both the control and warlike store departments, or that each department should have its own transport separately. I am of opinion that the transport of the two corps should be separate.

It may be said that this would be increasing departments, but I do not think any inconvenience would arise from the arrangement. The transport would be part of the organization of the store branch, as the horses are of a battery of artillery, a troop of the engineer train, or a cavalry regiment. Horses might always be transferred at any moment from one department to another, according to the requirements of the war.

There is one other alteration that I should like to see introduced as a regular part of the system of the army, and that is, regimental transport. I think that every corps should transport its own drivers, horses, waggons, &c. The system need not be fully developed in time of peace, but a nucleus of the transport should exist for the sake of practice, and the training of drivers in every regiment.

The horses for the regimental transport should be furnished by the control depart-

ment, and should always be kept efficient by that corps, but should be entirely under the control and responsibility of the commanding officer of the regiment while attached to it. When not required for regimental purposes, they should be placed at the disposal of the control department, by an order from the officer commanding the garrison division or brigade.

There is something in a name and it is to be regretted that the name "control" was ever adopted: it has aroused jealousy and suspicion, and in some instances has caused officers of the department to take a very false view of their position and duties. Why not return to the old terms "commissariat department" and "store department," which everybody knows and understands?

In the transaction of all military business under the present system, there appears to be a link missing. If any service requires the action of several departments, such as the control, the engineers, and a military department, there is nothing to connect their work but the memory of the general officer commanding, for the independent departments cannot condescend to take instructions from each other; and as each complete its part, the subject has to return to the general before it can descend into the next department, to be carried on a step further. It is true that the general may read up the papers again each time a subject comes before him; but if his command is large, and the papers voluminous, which is very frequently the case, this is a great, and, I think, an unnecessary, tax upon his time, which should be devoted to more important and useful duties. On the other hand, if he trusts to his memory, and it is not perfectly correct, there is a great chance of the service miscarrying. The action of each department may require several weeks or even months of correspondence. I have known a correspondence to be lost on its tortuous journey, and be forgotten altogether, till the general happened to inquire what had become of it.

Again, all complaints from the troops about provisions, barrack damages &c., are forwarded to the head of the administrative branch, the "controller," and are submitted by him to the general commanding, he giving his own version and coloring to the subject. Should the general differ with him in opinion, he may refer the question to the Secretary of State for War; but the "controller" for and the correspondence, and the decision is returned, not to the general, but to the "controller," who instructs the general: "Can such a system be right? and will troops ever be satisfied with it? I think not."

We are then told by the civil element that the complaints are not against the controller. "Against the commissaries or contractors! But is not the 'controller' responsible for his subordinate officers and contractors? The troops only recognize the one department, which they are told comprises all the administrative branches under one head—the 'controller,' they have nothing to do with the subordinates. Moreover, is not the control department especially a branch of the war department? and are not its officers dependent on the heads of their departments, usually civilians, at the War Office, for everything including their own advancement and their stations? Is it not probable that their opinions may be biased by a consideration of what will be pleasing to their patrons?"

The link which is now missing existed formerly in the quartermaster general's department. It was the duty of the quar-

termaster general to connect the work of other departments when their action was independently required, and he stood between the civil and military departments, and from his knowledge of the requirements and feelings of soldiers, filled up the gap which now exists owing to the want of sympathy and knowledge on the part of the civil branches who are now called upon to act and judge on questions which they cannot fully appreciate, and the want of confidence on the part of the troops in their judgment.

The old organization of the commissariat department was sound and good; it stood the test of years of practical experience; it grew under the hard hand of necessity; it carried our army through all the difficulties of the Peninsular war, and led our troops to victories the most brilliant in the annals of our history. During many years of peace it was curtailed and cut down to the lowest ebb, till a mere shadow of the once complete machinery remained. As time rolled on, nothing was left of the once splendid army but our regiments, perfect in themselves, and supported by their incomparable regimental system, but unconnected by any of those departments which weld corps together and form them into an army. At length we found ourselves plunged in war, with no preparation to meet the difficulties. The brilliant victory of the "Aima" stands out in bold relief to testify to the excellence of the old regimental system; while the lamentable failures of the administrative branches in after months show too well how completely the system of those departments had been allowed to fall into decay.

As soon as peace was restored, every mind was at work to repair the damages which our parsimony had caused; but instead of re-establishing a system which had been proved by years of hard experience, and endeavoring to bring it to perfection, a new element appeared, and with powerful hands seized the reins, and has well nigh steered our once glorious bark into the channel of destruction.

#### REVIEWS.

The *Aldine* for November comes to us richly freighted with art and literary treasures, something after the manner of one of the argosies of old, that made periodical returns from distant lands, bringing the most valuable things that could be seized in all. Artistically, the place of honor is held by an exquisite picture called "Dinner-time," after the German Knauts, showing a dark-haired Gretchen feeding her ducks, and equally commanding respect in the charming rural subject, in the management of details in the original picture, and in the keen and elaborate engraving. The other full page pictures are "Rescued at Sea," a terrificly striking representation of the White Star-ship *Bahic* taking off the passengers of the wrecked ship *Assyria*, in the fall of 1872; and "Normandy Cattle," breathing the very atmosphere of the country and of the best artists of the French School, who have made such subjects their profitable study, beyond any other painters of the time. Of other pictures we have two magnificent views—outer and inner—of the Alhambra, at Granada, in Spain—the "North Wall" of that noble mosque, and the "Hall of Ludaraj," being the points of illustration chosen; two fine pictures, nearly full page, by Hamner, "Under the Ems," and "The Stepping Stone," conveying the charmingly wild scenery of the Upper Delaware; a general view and two interiors of York

Minster, in continuation of the series of pictures of the great religious houses of England, now in progress in *The Aldine*; a very pleasant glance at dog-life, in "Master's Slippers," by Elwes etc.

Quite a material change is evident in the literary management of *The Aldine*, under what we must suppose the new editorial charge; and undoubtedly strength is added, without any apparent deficiency in grace and delicacy. The most notable changes are to be found in the appearance of a slashing editorial article under the editorial head, "America's Example," which reads as if there might be an intention to follow it with others of the same vigor,—and in the commencement of a continued story, "Lost Lillian Bracy; a Tradition of Charles II's Time," which opens with a graphic picture of a May-day of that period, and promises to possess a most absorbing interest, allowing few who commence it to lay it down unfinished. Rumor has it, that this story, which bears no name, is really one of the unpublished MSS. left by the late G.P.R. James; and the intrinsic evidence of style and incident would favor the supposition. There is another story of much power, compiled, by Mrs. H. G. Rowe,—"The Eagle in the Sea-Bird's Nest," &c., &c. Taken all in all, *The Aldine* presents a noble number for November, that must command attention in the literary and artistic worlds.

*The Aldine Company* has determined to establish an Art Union, similar to the well known Art Union in England, and distribute 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 tickets 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 55 Maiden Lane, New York City.

*The Science of Health* for November discusses in a sensible manner the questions of Beds, What They Should Be; The Temperance problem; Parental Responsibility; Regular Meals; Baneful Habits Affecting Health; Disease and Its Treatment; Infant Mortality; The Great Scandal a Possible Blessing; Kitchen Utensils, illustrated; How to Keep Warm; Suicides; Doctors and Quacks; with a variety of specially useful information in the Household Department and Answers to Correspondents. The present is a favorable time to subscribe for *The Science of Health*, which is one of the most useful of all our magazines. Price only 20 cents a number; or, \$2.00 a year, and three months free to all who subscribe at once for 1875. Address S.R. Wells, Publisher, 359 Broadway.

The contents of the October number of *Blackwood*, just issued by the Leonard Scott Publishing Co., 41, Barclay St., New York, may be summarized as follows:

- I. "Alicia Lorraine." Part VIII.
- II. "The Abode of Snow." Part II.
- III. "Sir Barnastie Tarleton."
- IV. "International Vantier" No. VII.
- V. "Army Control."
- VI. "The Story of Valentino and his Brother." Part IX.
- VII. "School Board Religion."
- VIII. "Horatian Lyrics." A free version of three well known odes, respectively entitled by the translator, "The Golden Mean," "A Christmas Carol," and "To Milledred."
- XI. "The Founders of Modern Liberalism."