CARLETON PLACE C. W., MAY 7, 1862.

No. 35.

RIFLED GUNS AND SMOOTH

[To the Editor of the Times.] SIR.—So much misapprehension prevails as to the relative merits of rifled and smooth bore guns, that I am led to offer a few observations on the subject. I will take for comparison the 110 poun-

der rifled and 68 pounder smooth bore guns, as being the most powerful of their respec-

pounder rifled gun propels its shot with a ual aid to the Ministry in every county velocity of about 1,210 feet a second, while We know these facts, because the Bishop with a charge of 16 lbs of powder the 68 made no secret of the promises he had pounder smooth bore gun gives a velocity of received, but gave them to his people as a

weight multiplied by the square of its veloc Lynch intimated his intention of supporting ity, so that the damaging effect of these two shots would be as 110 x 1,210-2 for the 110 called upon him on behalf of the Governpounder, and as 68 x 1,580-2 for the 68 ment with a new School bill, which h pounder, or very nearly as 17 to 16 in favor expected the Ministry to pass during the

of the 68 pounder. This small difference is scarcely so much as is due to the difference of charge, so that with equal quantities of powder the rifled cun would have rather the

creased to 20 lbs the effect of it shot upon plates at short distances exceeds that of the in Parliament. He said at the same time 68 pounder to an extent fully equal to that that Dr. Ryerson had prepared another due to the excess of charge. This has been measure on the same subject, and he was proved by many experiments made against willing that both bills should go to a select plates with a gun rifled on the shunt plan, committee for consideration! It so happens of the same calibre as the 110 pounder, but that Dr. Ryerson's bill is not before the made heavier and stronger, so as to bear House, and is not likely to be, for Mr. J. the larger charge. In short both theory A. McDonald afterwards intimated that the and practice show that the battering effect Government had no intention of introducing at close quarters is pretty nearly proportionate to the quantity of powder used, and that had been in the country instead of on his very little is either gained or lost by rifling way across the Atlantic to assist in the the gun or increasing the weight of the pro

These observations, however, apply only to very short ranges. The spherical shot, meeting with greater atmospheric resistance in relation to its weight, loses velocity so question; that the Government had no much more rapidly than the elongated shot that at the distance of only 670 yds. the two people of Upper Canada by destroying the projectiles move with equal velocities. Hence | national school system at the bidding of a at that point, the force of the 110 lb shot few ecclesiastics. The present Government will exceed that of the 68 lb in the proportare bold enough in many things, but they tion of the weight, or as 110 to 68. As dare not pass a school bill for Upper Canada the distance increases the superiority of the by French votes. They had enough of tha heavier shot is further augmented, and at in 1854. Dr. Lynch would have found 2,500 yards the rifled projectile strikes with himself sold by cute John A., as very many fully four times the effect of the 68 pounder have been sold before him, and he would

itself, not being subjected to the excessive dared.

We have to offer our congratulations jectiles, can be more easily constructed.

I have stated that the penetrating power upon the amount of its charge. When, therefore, we are told that the Americans and they ran, and they have as their recom are using projectiles of 200 lb., and are pre-paring guns for projectiles of 1,000 lb., we paring guns for projectiles of 1,000 lb., we can form no opinion of the quantity and case, and send it down to posterity as a strength of the powder they employ. Our own service 110 pounder has been repeatedly fired with projectiles of 1,000 lb., but we should greatly err in estimating the powder of the gun by that criterion. Judging the American ordnance by the results of the late naval conflict, we must conclude that it is greatly inferior in penetrating effect to ours, for we know that defensive structures closely resembling those applied to the Mer rimac and Monitor, both in thickness and construction, have, in experiments at Shoeburyness, readily yielded to the fire both of 68 pounder and 110 pounder guns.

Yet, though I consider our 110 pounder, weighing 81 cwt., to be amply sufficient for firing shell, it must be conceded that neither it nor the 68 pounder smooth bore, weighing 95 cwt., nor any other gun as yet in the service of this or other countries, is sufficiently powerful to operate with effect and "removes the febrile symptoms," as we is not by piercing small clean-cut holes with as wards off an invasion of the disease steel shot that we can hope to destroy or disable such a ship. To act with proper effect from a respectable quarter—it is gratifying we must knock large ragged holes in the side and render the interior untenable from splinters. We now know that a gun of 12 tons weight, fired with a charge of 50 lb of tons weight, fired with a charge of 50 lb of supply this Western Province. I am to'l of powder, will break through the sides of the Warrior, the strongest ship affoat.—
Against such a gun the extemporized Monitor and Merrimac would be little better than timber ships, for the cast iron shot, in mean timber ships, for the cast iron shot, in mean timber ships. timber ships, for the cast iron shot in passing through the armor, breaks into a thousand pieces, and would act like shrapnel on the crew within. But we must be prepared

SEPARATE SCHOOLS. election, Dr. Lynch, Roman Catholic Bishop of Toronto, received a promise from the Government, that if he would grant assistance to the Government in the coming contest, he should have all the privileges in the matter of Separate Schools which he desired. The same hope was held out to Dr. Charbonnel, Dr. Lynch's predecessor, and it was

tive natures at present in the service.

With a charge of 14 lbs powder the 110 not fulfilled; but the new incumbent was not deterred by that fact, and granted effectreason for their supporting the Government, The force of a projectile is equal to its Before the late election in Toronto, Dr.

of Ottawa, moved the second reading of the Separate School Bill, which he has introduced regularly every session since he has been canonization of the Japan martyrs, he would ere this have discovered that John A. had intention of braving the indignation of the have found small consolation in the sneak This is a fair statement of the case so far ing recommendation of the honourable genas battering effect is concerned, but to judge tleman to the House to let Mr. Scott's bill of the relative merits of rifled and smooth be read a second time, without reference bore ordnance we may consider also their to the principle! Very cunning, indeed, comparative efficacy as shell guns. Now, Mr. Macdonald, a nice trap to lead Upper

Dr. Lynch and his faithful followers on the immense results that have attended their of the gun at short ranges depends chiefly extraordinary exertions of the past year pence-a broken promise of Mr. John A

CURE FOR SMALL POX.

To the Editor of the Peterboro Review. SIR-I regret to have to inform you that we are likely to be troubled with small por in this vicinity. At such a time any infermation which tends to mitigate the severity of so loathsome a disease cannot fail to i read with interest.

A statement is going the rounds of the press, to the effect, that, a paper has be sent to the Epidermiological Society, by M Milne, Surgeon, of Nova Scotia, based up n facts alleged to have been gathered from I= dians by Captain Hardy, of the Royal Art lery; and stating that an infusion of the plant "Sarracenia Purpurea," or Pitch * Plant, taken at intervals of a few hours cu

"keeping an antidote in the blood. If this be true-and it seems to co to know that the plant in question gro-

in profusion.
It was called "Sarracenia" in honor Dr. Sarrazin, of Quebec, who first sent our

hain of lakes was opened to the entrance Literary and Scientific Instituof all British light draught ocean vessels. tions.

Perceiving our ability to erect fortifications Hospitals and the St. Lawrence that might command Geological Survey..... s channels, and thus neutralise all they Militia and Enrolled Force... ad done, Great Britain dug a canal from Aria, Agriculture, and Statio the foot of Lake Onterio, on a line parallel to the river, but beyond the reach of American guns, to a point on the St. Lawrence Actionstural Societies. low, beyond American jurisdiction, thus Emigration and Quarantine. curing a channel to and from the lakes | Pensions

terprises and by violent party conflicts, Rents, Repairs, &c., do ir people failed to notice, at the time, that Roads and Bridges Rafety of our entire frontier had been Ocean and River Steam Serstroyed by the digging of two short canoyed by the digging of two short can-Near the head of the St. Lawrence, at Light Houses and Coast Serfoot of Lake Ontario, the British to comete their supremacy on the lakes, have uilt a large naval depot for the construction Redemption of Seignorial and repair of vessels, and a very strong for-tress to protect the depot and outlet of the lake—which cannot be reduced, it is supposed by them, except by regular approaches.

They have also strong defences of the St Reception of H. R. H. the ossible to the ingress and egress of their ets. As things now are, a British fleet ould sail from the ocean into the lakes, evastate the cities upon the shores, Foize the commercial vessels on their waters, and

I can see but little advantage in the smooth bore over the rifled gun, unless it be that the spherical projectile, being lighter, is more readily handled, and that the gun itself, not being subjected to the excessive competant to control the channel, however numerous the hostile fleet.

To defend the Northern frontier the Premium and Discount........

nited States should be able to place a strong | Bank Imposts..... portation at command to be able to speedily concentrate on the St. Lawrence a force of acknowledged competency to take possession of the canal and of Montreal and hold them.

The possession by the United States of the outlets of Lake Ontario, and of Montreal Passenger Duty (Emigration & nd its communications, would cut off the upplies from the Canadians, and leave hem to an unsupported and hopeless con-lict with all our forces. Such a conflict

could be neither protracted nor dangerous. Fisherica. Shipping Office Fees...... Messages had reached the Government at thens, announcing that the garrison at auplia was breaking up. A great number insurgent officers and soldiers have sur-

irbances at the Warsaw Cathedral have een condemned to military service. An obstinate fight occurred between the urks and Montenegrins near Nahrich. The latter were repulsed. There was con-iderable loss on both sides.

Additional telegrams fromBombay, March

7th, announces that Lord Elgin was inalled viceroy of India March 13th. Mogul Bey had been hanged in front of e palace of Delhi. A widespread Mahratta conspiracy had con discovered and suppressed at Hyderabad

n the Deccan.

Bysabus Jung, President of Scindis, had abolished the high export duty on cotton in Gwalior.

London Times, writing about March—reports that a Confederate privateer in the

Post Office..... Public Works... 279,006.92 Territorial includ-

Quarantine)..... ver Police.....

Great Western Railway Inter-Education, West.....

nal plan as developed in his speech of last session this enormous defleit must have been still greater. He then anticipated paying 800,000 on account of the Seignorial indemnity, and that the Ottawa buildings should be pressed with all speed. He dhe carried out these intentions, and included within the transactions of the year various items of interest that have been omitted, the deficit for 1951 and the properties of the properties of the properties of the properties of the properties as the receipions, on account of the ocean steam service coatract, of 351,138 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The receipion of the prime of wales is the heading of items which amount to 63,-1951 and the properties of the ocean steam service coatract, of 351,138 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. The light house and coast service cost, 110,462 dol.; the fisheries, 27,342 dol.; the seignorial tenure, 224,133 dol. 1861 would have been three millions and a 225 dol.
half of dollars. As it is, the deficit is sufficMiscellaneous items run up to 45,849,

spectors

nearly \$20,000. The Money Order Office also exhibits a balance of \$4,323; the revolute having been \$10,281, with \$5,957 272,041.55

The administration of justice in Canada East entailed a total expenditure of \$350,557; in Canada West, \$319,992. The disproportionally small payment allotted to the judges stands out in contrast with the sums realised by several of the minor officers of the law. In Upper Canada for example, the Clerk of the Crown and Plear receives a \$37,771.76 \$37,771.76 \$37,771.76 \$37,771.76 \$37,400 for contingencies of his office; whilst the Puisne Judges roceive but 4,000 salary, and are allowed but \$100 for each of their press and pulpit in its favor it is utterly impressed the individual and a member in Opposition, I feat would have little chance of adoption, I feat would have little chance of adoption on the feat would have little chance of adoption on the feat would have little chance of adoption on the feat would have little chance of adoption on the feat would have little chance of the form of the senting on the lead of attention to the pressure as an indiv and are allowed but \$100 for each of their

bore ordnance we may consider also their comparative efficacy as shell guns. Now, the shell of the 68 pounder smooth bore contains 2½ lbs of powder, but the shell of the 110 pounder rifled gun holds a bursting charge of 8 lbs. So also the form and expacity of the 110 pounder segment shell make it far more effective than the corresponding shrapuel shell of the 68 pounder. The rifled gun has therefore enormous superior tipe of the shell of the commercial vossels on their waters, and then no few days, appear off Boston, Now, the shell of the 68 pounder smooth bore contains 2½ lbs of powder, but the shell of the 110 pounder rifled gun holds a bursting charge of 8 lbs. So also the form and expacity of the 110 pounder segment shell make it far more effective than the corresponding shrapuel shell of the 68 pounder. The rifled gun has therefore enormous superior tipe of the principle! Very cunning, indeed, then, in a few days, appear off Boston, Now, the department committed the prison inspection figure, conjointly, at \$148, odd, odd, they have the department committed to the prison inspection figure, conjointly, at \$148, odd, odd, odd with the common school system remain intent? But it did not succeed. It was a paint us on the ocean frontier. To place the inspection.

Exponses of the legislature look large.

Total ordinary Expenditure, 10,426,090.04

Mr. Macdonald, a nice trap to lead Upper Canada and the prison inspection figure, conjointly, at \$148, odd, odd, odd with the joint or succeed. It was a paint us on the coean frontier. To place to say, that I believe they are as desirous of the link of the commission of the long structure look large.

The Penitentiary, reformations, and the prison inspection figure, conjointly, at \$148, odd, odd, odd then, in a few days, and it is the common or the commit in the common or the commit is and the priso

685.26 da West. Besides literary, and scientific institutions received \$17,900, of which \$10,-600 went to Upper Canada.

The province was charitable to the extent

Militia expenses amounted to \$84.687; 24,283.39 of which \$19,223 were applied to salaries, \$5,722 to drill of cavalry troops, \$10,214 to field batteries, \$1,152 to foot companies of 81,950,39 artillery, \$13,926 to rifle companies, 529.72 The census—including payment of Com-14,255.18 missioners appointed to obtain the return—

has thus far cost \$118,393. Agricultural Societies in Lower Canada 12,890.25 received \$48,725; in Upper Oanada, \$53,-

23,372.33 The emigration and quarantine department entailed a total expenditure of \$48,435, 860.00 of which about \$3,600 are charged to the 67,304.25 Crown Land Department, being the expen-

138,262.98
69,763.86
19,936.47
24,224.47
Solution of the Ottawa buildings, \$655,249 are charged, \$304,842 having been paid during the year to Jones, Haycock & Oc., and \$289,551 to 24,160.00 T. McGreevy, for material and work; \$6,-475.00 091 to Stent & Lever, 6,634 dol. to Fuller 22,110.74 & Jones, and 1,000 dol, to Cumberland & 27,750.13 Storm on account of professional services as architects.

The amount paid for colonization roads in Canada East was 52,434 dol.; in Canada

Mr. Hugh Allan figures as the receipient,

UNITED STATES FRONTIES

The following is an extract from. We report of the military committee of Congress.

How can the porthern or lake frontier to successfully defined, operating the statement of Mr. Gat United States are prohibited, by treasy, from building war vessels on the lakes? On the statement of Mr. Gat United States are prohibited, by treasy, from building war vessels on the lakes? On the shores of three lakes the United States are prohibited, by treasy, the provided of the lakes of the part was only 1, 585 dol. area on the provided 1984, 1985. We provided 1984, 1985. We provided 1984, 1985. We provided 1984, 1985. We have the same of Mr. Gat the part was only 1, 585 dol. area on the provided 1984, 1985. We provided 1984, 1985. W oharged against it as expenses.

Mr. Speaker, to the methods and new offorts be sent back again to their own homes, to Public Works show a net revenue of \$45,in the way of settlement to see that the inbe forced in all probability, to a second emi-

100,703.43 | The printing and binding of the Conson324,619.63 | dated Statutes, and the supply of Acts to the
30,578.35 | dated Statutes, and the supply of Acts to the
30,578.35 | In moving from this committee, Mr. Speak10 | English of the supply of Acts to the
30,578.35 | In the matter of education, \$259,601 are
22,124.39 | Charged to Canada East; \$247,192 to Canada Canada East; \$247,192 to Canada East; \$247,192 vince expands large sums annually to ar- they have been too often tempted and serive at a knowledge of its own resources, duced, both male and female for want of a this committee is the natural corrolative of properly guarded landing depot? I do not this committee is the natural correlative of that expenditure. Turning over the pubpretend that we should set up anything on

Geological survey (1861)... Bureau of Agriculture (salaries,

Roads and bridges (C. E.). Improvement fund (C. W.) Colonization Roads (C. W.) Do. Do. (.C E.) Crown Lands Survey (West)
Do. Do. (East.) Do. Do. Colonization Road Agents

(West)...
Do. Do. (East)...
Inspection of Agencies.....
(West)...
Do. Do. (East)... Agricultural Societies (West) Do. Do. (East). Emigration service, inland and foreign, as per page 112, Public Accounts....

Emigration Commission.... Thus, we see, that \$500,000 per annum [the census item being omitted as expeditional] may be said to be the annual expen-

diture of the Province on the various branches of the Administration, which fall the proof, the study, and while the flargest content to the proof of t

20,315.09
84,687.60
2,317.00
118,393.77
102,620,21
48,435.57
34,509.38
35,420.00
998,815.30
39,572.05
164,270,10
164,270,10
175,295. The Chambly gave \$10,211, and cost—the former \$400, and the latter, \$7,295. The Chambly gave \$10,211, and 110,462.08
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24,110, The Ottawa and Rideau gave \$10,211, and took \$14,110, The Ottawa and Rideau gave \$51,318. The slides at each and cost, \$21,318. The slides at each and cost, \$21,318. The slides at each and cost, \$21,318. The slides at each and cost and cost at large and cost and cost at large and co press and pulpit in its favor it is utterly im- their waters. Formerly it was not so; but possible that we should fail to effect a salu- for the past 10 or 12 years, no department The Penitentiary, reformatories, and tary reform in the emigrant service and the of the public service has been more steadilic Accounts, yesterday placed on the table, I find the following principle items of expenditure, for what we may call exploring or exhibiting the resources of the Prometric Pr 500 persons, who are anxious to draw breath before continuing their pilgrimage to the in-20,315 00 terior. In the name of humanity -in the name of common decency-I appeal to the 8,091 00 gentleman opposite to see that some tem-6,805 00 porary landing place and Emigrant Refuge 57,845 00 is provided, before the spring fleet pours its 17,398 00 passengers in upon us. It was mainly to 54,000 00 effect this one point that I was so anxious to obtain my Committee before the Easter 75.444 (C) recess—but it is not yet to late, if the 41,969 00 hon. gentlemen opposite will order it to be done. [Loud cries of hear.] the vallue of every suggestion, of this kind must depend Mr. Speaker, not only on its fitness, but

> 2,976 00 execution, if it should be adopted -I allud-3.514 00 ed to the Minister of Agriculture. Now it 53,894 00 seems to me Sir, that I believe the opinion 48,725 00 to be a growing one and that portfolio ought to be estimated as one of the most 45,329 (0 other in the Administration. Every one ad mits that the legal offices of those who may be called our Ministers of Justice, that the finance, the Crown Lands, and the Public Works, require the ablest men to fill them well, but, hitherto, it seems to have been considered that the Ministry of Agriculture including Emigration—might be given to any second or third rate man. [Hear, hear.] Now what should be fairly required as a directly within the scope of this Committee's inquiry. This sum, \$500,000, is about tour per cent, on the total revenues of the Province, and whether four per cent, be a sufficient proportion for these branches of the public service, I am not now going to discuss; in my own opinion, ten per cent on the revenue would not be an excessive expenditure on the work of increasing the popular.

also on the character entrusted with its