SPTEMBER 7	THE VOLUNTEER
FOURH MATCH.	Matten No.
lat prime Court stand males \$90 min	The Merchants' I
	lst prize—\$30
	2nd " — 15
Liu prizo\$8	3rd " — 10
	4th " — 8
by Messrs. Renfrew & Marcou.	Range-300 yards; 5 sho
5th ps:	Pattern Rifles; open
Ranges—200 yards; 5 shots; any Rifle; any	Association. Entranding This match resulted
	score:
2 feet square; open to all comers. En-	
trance \$1. Members of the Association 50 cents.	Capt Worsley, 60th Rifles
000 ===	Sergt Ferguson, Vol. Artil
16. Land Eddle Dodd Dommillo 24444 TO	Qr-Mstr. Toole, 60th Rifle Col-Sgt Underhill, "
Adjt. O'Neil, 8th. 44244 18	Sgt Smith, R. E
Captain Worsley, 60th Rifles, 34434 18 Sergt From 8th Ratt 33434 17	Ensign Hollwell, 8th Batt
Sergt Frew, 8th Batt, 33434 17	Private J. Leet, 54th Batt
dilles, orth Date, 17	Lieut. Harris, R. E
MATCH No. 5	MATCH No.
The Hamilton Cup.	The Lower Town Clerk
lst Prize.—Silver Cup, presented by R.	1st Prize—\$50
Hamilton, Esq., and \$10 by the Association. 2nd Prize.—Tankard, \$20, presented by	2nd " -30 3rd " -20 . And 5
Levv.	each.
	The first three prizes to l
out by Mr. J. Darlington.	or otherwise, as the winn
4th Prize —Silver beer mug, presented by Cremazie.	Ranges 300, 500 and 600 ye
5th Prize.—\$3.	first two ranges, and
Ranges—400 and 600 yards; 3 shots at	range; open to all ment Pattern Rifles. I
, dovernment I abbern tends, open	Members of the Association
to members of the Association En-	RESULT.
The following is the same of the shows	Sergt. Ferguson. Vol. Art.
The following is the score of the above match:	Mr. P. Cleveland, 54th Ba
400 600 m	Lt McDougall 5th Royals.
"WIE () IN THE COLUMN	Dto Hollower 8th Pott
t Patterson, 8th do	Col Sergt Kelly, 60th Riffe Pte. Hollaway, 8th Batt. Corp McLeod, 54th Batt.
Red-44 Fig. Dig. Clab 202 242 10	Capt McKenzie, 54th Batt
C. Beckett, Esqr., Rifle Club 303 343 16 Cpl. Flanagan, R. E	Col Sergt Under hill, 60th
Match No. 6.	Sergt Banfield, 53 Regt
lat notice Cilcum and and and and and	Pte H. Leet, 54th Batt
1 "9th fod hy Mogana Woods & Co. and \$10	MATCH NO.
	Sheffield House Cup (Bo
aley 601 prize \$10 presented by Capt Wor-	lst prize—Winning Bat ver cup and salver, \$60, 1
of prize—\$10 presented by Capt Wor- \$7, 60th Rifles. and prize—Plated jug and tray, \$7.50, pre-	ry Smeaton, Esq.
out by Mosers Relanger and Garieny	Highest individual score
4th prize—\$4.	2nd do do
Range \$2.	Ranges—200, 300, 400 s
"848 400 acd 600 yards; 3 shots at each;	shots at the first two 400, 5 shots at 500
open to all comers; any rifle. Entrance \$1. Members of the Association 50	men from each Battal
Cont.	Volunteers, and each
100 f-11	ships in Canada, and
100 000	Rifle Club; Governme Entrance \$5
Capt Worsley, 60th Rifles 344 342 20 Cr P. Cleveland 54th Ratt 444 422 20	THE STITUTE OF
Corpl Shaw	5th Royals, Montreal
Corpl Shaw, do 423 234 18	54th Batt., Danville
Cpl W. Andrews, 3rd do V.V.R. 343 233 18 Pryt H. Leet 54th Batt 234 323 17	8th Bat. Vol. Rifles, Queb
Prvt H. Leet, 54th Batt 234 323 17	Royal Engineers Quebec Rifle Club
MATCH No. 7.	78th Highlanders
Stadacona Cup.	60th Rifles
	53rd Regiment
by C. E. Levy, Esqr., and \$20 by the Association.	Vol. Garrison Artillery
and .	1st prize—5th Royals, Mo 1st prize—Individual Lt H
Ond prize—An Album, \$20, presented by the Association	2nd prize— do Sgt I
the Master Holliwell, and \$10 added by a Association.	
Au P1120	MATCH No.
Ath Prize—\$5.	Consolation 1
5000 vards: 5 shots: Army Rifles:	lst prize—\$10
	2nd prize—\$8 3rd prize—\$6
The following was the result:	Range—200 yards; 5 sho
disting and one of the property of the propert	to all who have unsue
Ensign Hollwell, do	ed at the meeting.
Capt. Worsley, 60th Rifles	RESULT.
Sergi Worsley, 60th Rifles 34434 18 Barrie, 78th Regt 43442 17	Sergt Norris, 8th Batt

March No. 8.	Ca
The Merchants' Prize, \$80.	P
1st prize—\$30 5th prize—\$6 2nd " — 15 6th " — 5	Se S.
	C
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
Range—300 yards; 5 shots; Government	
Pattern Rifles; open to members of the	
Association. Entrance 25 cents.	E
This match resulted in the following	\mathbf{m}
score: 300y, Tl.	R
Capt Worsley, 60th Rifles 44434 19	
Sergt Ferguson, Vol. Artillery 44334 18	
Qr-Mstr. Toole, 60th Rifles 34334 17	C
Col-Sgt Underhill, " 34424 17 Sgt Smith, R. E	Č
Sgt Smith, R. E	ĺ
Private J. Leet, 54th Batt 24433 16	in
Private J. Leet, 54th Batt 24433 16 Lieut. Harris, R. E 33324 15	а
Match No. 9.	
The Lower Town Clerks' Prize, \$150	
1st Prize—\$50 4th Prize—\$15	
2nd "— 30 5th "— 10 3rd "— 20. And 5 next highest \$5	
3rd " — 20. And 5 next highest \$5 each.	у
The first three prizes to be given in money	ĺ'n
or otherwise, as the winners may choose.	aı
Ranges 300, 500 and 600 yards; 3 shots at the	C
first two ranges, and 4 shots at the last	a S
range; open to all comers; Government Pattern Rifles. Entrance 50 cents.	o
Members of the Association 25 cents.	84
RESULT.	t]
Sergt. Ferguson. Vol. Artillery 29	p
Mr. P. Cleveland, 54th Batt 29	is m
Lt McDougall 5th Royals	p
Col Sergt Kelly, 60th Rifles	ľ
Col Sergt Kelly, 60th Rifles 28 Pte. Hollaway, 8th Batt 28 Corp McLeod, 54th Batt 28	86
Capt McKenzie, 54th Batt	m ti
Col Sergt Under hill, 60th Royals 26	p
Sergt Banfield, 53 Regt 26	p
Pte H. Leet, 54th Batt	p
Матен No. 10	p
Sheffield House Cup (Battalion Match.)	p
1st prize—Winning Battalion, sterling sil-	d.
ver cup and salver, \$60, presented by Henry Smeaton, Esq.	b
Highest individual score \$10	a
2nd do do \$5	g
Ranges—200, 300, 400 and 500 yards; 3	n
shots at the first two ranges, 4 shots at 400, 5 shots at 500 yards; open to six	st
men from each Battalion of Regulars and	tl
Volunteers, and each of Her Majesty's	tl
ships in Canada, and from the Quebec	ir w
Rifle Club; Government Pattern Rifles.	ja
Entrance \$5 Pts.	a
5th Royals, Montreal	p
54th Batt., Danville	to
8th Bat. Vol. Rifles, Quebec 249	fo
Royal Engineers	a
Quebec Rifle Club	ti
78th Highlanders 225 60th Rifles 222	[t]
53rd Regiment	CI
Vol. Garrison Artillery 176	w
1st prize—5th Royals, Montreal 262	d
1st prize—Individual Lt Holwell,8th Bt. 51 2nd prize— do Sgt Frew, do 49	19
. •	80
MATCH No. 11.	b
Consolation Match.	0
1st prize—\$10 4th prize—\$4	p
2nd prize—\$8 5th prize—\$3 3rd prize—\$6 6th prize—\$2	m
Range—200 yards; 5 shots; any rifle, open	C
to all who have unsuccessfully compet-	di se
ed at the meeting. Entrance free.	of
RESULT.	g
Sergt Norris, 8th Batt 44444 20	P

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apt Esdaile, 5th Royals..... 34344
                                                            18
rivate Irving, 78th Regt..... 43344
ergt Tointon, 60th Regt..... 43334
                                                            18
                                                            17
. M. McDonald, 8th Batt..... 34433 17
orpl. Campbell, 3rd Batt V.V.R. 34433 17
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MATCH No. 12.

Champion Match.

Prize—\$20, presented by J. K. Boswell. sq., and \$20 by the Association, (cup or oney.)

lange--600 yards; 5 shots; open to winners of prizes; any rifle. Entrance free.

RESULT.

S Sgt Underhill, 60th Rifles....23344 16

AN INGREDIENT OF GUNPOWDER.

The London Engineer says: Picrate of potash has for many ears been pointed out as a promising ngredient in the composition of gunpowder, nd circumstances have at last rendered it ommercially available. M. Payen has made communication on the subject to the lociete d' Encouragement of Paris, in the name of M. Cleroitad, who has been engaged for even years in the application of this salt to he making of powder, and within the same period M. Casselhaz, manufacturing chem-

serious M. Cassenaz, manufacturing chemi-ist, has succeeded, by improved methods of manufacture, in reducing the cost of picrate of potash to less than 2s. per pound. The explosive quality of this salt would seem to allow of great improvement and modifications in gunpowder. The propor-tions of the materials which form ordinary ions of the materials which form ordinary owder are nearly fixed, and an increase in projectile force is only to be obtained by superior care in the manufacture, greater com-pression, or by the mode of firing. The employment of picrates opens a wide field for experiment. They possess considerable letonating power, which may be increased by the addition of certain other substances, nd thus a very rapid decomposition and reat bursting power may be obtained, while, n the other hand, the effect of the picrates nay be modified to any degree by inret subtances, such as charcoal, so as to prolong he decomposition during the whole time hat the charge is in the cannon, thus obtainng the largest amount of projectile force with the lowest bursting power. The proactile power may of course be modified be ltering the proportion of the picrates emy ployed; for artillery the amount is stated o be from 8 per cent. to 14 per cent., and or small arms 20 per cent. The bursting orce of hollow projectiles may be considerably augmented by the use of picrates, but he maximum is said to be obtained from he employment of equal quantities of pirate and nitrate of potash.

The effects of the new powder on the arms with which it is used have been carefully stuied. It is found that in the open air and vithout compression it gives off cyanhydric cid and binoxide of nitrogen, while, when compressed in a closed space, such as the arrel of a gun, it only produces a mixture of nitrogen and oxygen, and of carbonate of cotash mixed with charcoal. The employnent of the picrates does away with the ne-essity for the use of sulphur, considerably liminishes the amount of smoke, and less ens the wear of the arms. The manufacture f the powder, which is carried on at Bouret, not far from Paris, is described by M. eyen as very simple. It consists in pound.