

being a very plain and cheap one, should be sufficient for any volunteer officer.

In New South Wales, the Government is kinder to its volunteers than Canada. We do not know the figures of its grant to them, but from the following, which applies to cadets, it would seem that the seniors must presumably be still better treated.

SENIOR CADETS.—The following is a synopsis of the instructions issued for the affiliation of Cadet companies and units to existing regiments and corps.—The Major-General Commanding is prepared to sanction the advance of £1 to the clothing fund of regiments (which sum will be recovered from Cadet grant for 1895), making £2 in all per head available, directly officers are appointed, and is further prepared to recommend a grant to captains of £5, and to subalterns £3, to assist in expense of uniform on joining. Uniform beyond that of undress will not be insisted upon. Officers of Cadet corps will rank junior of their respective ranks, and will not hold executive command except in the Cadet Force. Arms and accoutrements will be supplied. Cadets may be enrolled between the ages of fifteen and twenty years, and, as Cadets, they will not be liable for active service. Cadets now serving may be allowed to remain until they attain the age of twenty-one years. Officers will be expected to pass an examination for their first commission twelve months after *Gazette* notice of same. Night parades may be held where considered both advisable and convenient. Cadets medically fit, of requisite standard, and otherwise eligible may be transferred to partially-paid regiments and corps as vacancies occur on approval of commanding officers responsible. Ammunition will be granted to Cadets in similar proportion to that granted to the regiment or corps to which they are affiliated. They will also be entitled to similar privileges as regards travelling, meal allowances and train fares.—*Col. Mil. Gaz. New South Wales.*

This would show that the value of Cadet Companies, as a training school for volunteers, is well recognized by the Australians.

In the season's shooting for the Challenge Cup and Championship Jewel of the North of London Rifle Club, Col.-Sgt. Howell 2nd East Surrey made the following remarkable scores.

Five scores at long ranges (800 and 900 yards), five at short ranges, in Volunteer positions; and

five short ranges, in Any position. Half the scores at least at short ranges, to begin at 600 yards.

| SERIES A. | | | | SERIES V. | | | | SERIES G. | |
|-----------|-----|-----|-----|-----------|-----|-----|-----|-------------|--|
| 200 | 500 | 600 | Tl. | 200 | 500 | 600 | Tl. | 800 and 900 | |
| 34 | 33 | 32 | 99 | 31 | 31 | 32 | 97 | 84 | |
| 33 | 34 | 31 | 98 | 33 | 33 | 31 | 96 | 82 | |
| 35 | 32 | 29 | 96 | 34 | 33 | 31 | 95 | 77 | |
| 32 | 32 | 29 | 93 | 32 | 32 | 31 | 95 | 77 | |
| 32 | 30 | 30 | 92 | 30 | 33 | 31 | 91 | 77 | |
| 473 | | | | 477 | | | | 397 | |

The "*Maple Leaf*," the organ of the 100th Royal Canadians, says in a recent issue.

Both our Battalions will be proud of the cordial welcome which was bestowed upon the Canada Rifle Team at the Bisley Meeting this year. We hope it won't be very long now before some of the "Old 100th" meet the Canadian Team at this meeting regularly in the future. So say we all of us!

The Militia list for '94 has not reached us yet. We suppose the Government Printer's Devil has mislaid our copy.

A Golden Wedding.

From the *Lindsay Warder* we glean that on Nov. 4th, at Blackstock, Ont., Mr. and Mrs. John Hughes of Blackstock, Cartwright, celebrated the fiftieth anniversary of their marriage in presence of their children and grand-children. Mr. Hughes was born in Tyrone, Ireland, in November 1823. His father was one of the old 67th "Royal Bengal" regiment, and was a descendant of the Welsh who settled in the north of Ireland in the 16th century. His mother was one of the McClungs of Tyrone, a Scotch family located in Ireland. Mrs. Hughes was born on St. Helen's island, Montreal, in May, 1827, her father being one of the Royal Horse artillery who saw service through the Peninsula, Waterloo and Indian campaigns. He was a descendant of the Scotch Laughlins who settled in Ireland. Mrs. Hughes' mother was a Huguenot, daughter of a French cuirassier officer, Puirier de St. Pierre, under Buonaparte. Fifty years ago the marriage of the now aged couple took place in Ireland, where the Laughlin family had retired. The following year Mr. and Mrs. Hughes came to Canada and settled in Darlington, near Bowmanville, in which township they resided for many years; but for upwards of a century Cartwright has been their residence. The children present on Sunday last were:—

James L. Hughes, inspector of schools Toronto; Mrs. Mary Scott of Toronto; Major John Hughes of Newtonville, Clarke; Major Sam. Hughes M.P., of Lindsay; Mrs. Elizabeth McAlpine; Mrs. Sarah

Jobb; Mr. Annie Beacock; Mrs. Lea Thexton; William Hughes, warden's clerk in Kingston penitentiary. There were twenty-one grand-children present, and only six absent. The jovial old couple were presented with numerous tokens of regard, not the least being a purse of sovereigns from their progeny. A most enjoyable anniversary was commemorated the happy couple seeming as lively as any of the sons and daughters.

The CANADIAN MILITARY GAZETTE is sure that all of its readers will join it in wishing the venerable couple, many more years of a happy old age.

The Action of Rifle Bullets.

The celebrated German physiologist, Professor du Bois-Reymond, has just published some important observations on the effect of modern rifle bullets on the human body. In this paper he says: "The bullet of an old rifle bored but a comparatively small hole through the parts of the body through which it passed, whereas the new bullet has an astonishing effect. If, for instance, the ball passes through the head of a corpse, the skull is burst asunder in all directions, and very little of the head remains. We cannot precisely define the conditions of the aggregation of a body. A piece of bottle, lac, or sealing-wax, if long exposed to uniform pressure, dissolves, but it bursts into sharp-edge-splinters if the blow of a hammer produces on it an effect which, measured in killogramme metres, is equal to perhaps a small fraction of the pressure when slowly exercised. We can, therefore, recognise the conditions of aggregation only by the consequences of mechanical operations on such bodies, and these consequences are quite different, though the operations do not differ at all in quality, but only in duration. Sealing-wax is an example of an apparently solid body, but which turns out to be a fluid if only we operate upon it slowly enough. The generally known phenomena of glaciers shew that ice behaves in a similar way. It is not possible, then, that water, which is generally regarded as a fluid, may behave as a solid, if only the time of operation can be made short enough? Every swimmer knows that he is liable to receive very severe blows from the water if he takes a header from a considerable height unskillfully. In order, however, to dash a vessel filled with water at the head of a corpse, and shatter it into small pieces like a lump of ice, a blow of such extraordinary velocity is necessary that it was not possible for such a phenomenon to be observed before the invention of the new rifles, which propel missiles with a velocity of 650 metres a second. If my speculation be correct, the effect of the new bullet is by no means an explosion, but merely a dashing to pieces, exactly the same as the well-known process of the bursting asunder of drops of hardened glass when the point is broken off.