

ratio of one to ten. It would appear from late experience that every carbine should be provided with a rod. I would recommend for this purpose a rod made in sections, screwed or hinged together after the manner of the one submitted from this Armory March 13, 1875, and referred to in my letter of that date. Such a rod could be easily carried in the soldier's pocket, or in some part of his equipment. The changes proposed by Captain Reilly of lengthening the barrel, affixing to it a ramrod, and changing the position of the sights would require much time and expense to accomplish. Before making such very important changes in the model of an arm, the opinions of officers from the field should be submitted to a Board to test their practicability and desirability. Knowing the Springfield rifle and carbine to be more powerful and accurate than any arms of their kind ever before issued to our troops, I am at a loss to understand the "general complaints of their inefficiency" to which Captain Reilly refers. I have carefully examined many of the bi-monthly reports, where commanders of companies are required not only to report their opinions of the arms in their charge, but to specify in detail each and every defect of arms and ammunition that comes under their observation. So far as I know the complaint of inefficient range has not been made in a single instance in the nine years that the Springfield system has been in use. On the contrary, a reduction of the charge has been asked for on the ground of severe recoil. I hope that Ordnance officers serving with troops will make personal investigations into all complaints of defects of arms and ammunition, and that specimens of defective arms and ammunition will be forwarded to this Armory for further examination. It is important to know whether the trouble is in the arm or the ammunition, or in both. I would also call attention to the importance of officers reporting, in their bi-monthly reports, the date of the fabrication of the ammunition. This point seems to have been omitted, in some instances, when it had a very important bearing in investigating causes of the defects complained of.

J. G. BENTON,

Lieut. Colonel Commanding.

NATIONAL ARMORY, SPRINGFIELD, MASS.,

August 11, 1876.

To the Chief of Ordnance, U.S.A., Washington, D.C.:

Sir: Pursuant to your instructions of the 2nd instant, I inclose herewith a report of a trial made by Lieutenant Greer at this Armory, to test the comparative merits of the Winchester rifle and ammunition, as sold by the trade for frontier service.

J. G. BENTON,

Lieut. Colonel, Commanding

NATIONAL ARMORY, SPRINGFIELD, MASS.,

August 11, 1876.

Sir: I have the honor to submit the following report of trials with a new Winchester repeating rifle purchased for use at this post. This rifle, model of 1873, weighs 35 lbs., loaded and with its magazine filled, in all fifteen cartridges, it weighs 9.27 lbs. As originally received it was only sighted up to 300 yards. During the trial a sight graduated from 100 to 900 yards was received from the manufactory. It was fired for accuracy at 100, 300, 500, and 900 yards; for penetration at 100 yards; and for initial velocity. The results obtained are tabulated below in comparison with those obtained by firing six new Springfield carbines, using both rifle and carbine cartridges.

The attempt to get a target at 900 yards was a failure; twenty six shots being fired without hitting the target (12 square,) using different elevations and firing both to right and left. These are believed to have fallen short, as the marker stationed behind the target could not see any of them strike the water, nor could he hear them pass his station. In rapid firing, using the magazine, there is no certainty that the cartridges rising from below will enter the chamber, as is evident from an inspection of the two herewith submitted. The bullet strikes on the end of the chamber, is upset and sometimes wedged so as to require several minutes to extract it. A sliding lid covers the opening in which the carrier block rises and falls; the groove in which the lid slides weakens the side frame at top so that a slight blow will bend it over the opening and prevent the working of the carrier block. During the trial one mainspring was broken.

JOHN E. GREER,

First Lieutenant of Ordnance.

Synopsis of Lieutenant Greer's Tab. Statement.

MEAN DEVIATION.

	100	300	500	900 yds.
Springfield Carbine {	R.C. 3.17	8.31	11.03	35.12
Winchester Rifle {	C.C. 2.43	7.97	10.05	36.52
	2.27	12.27	21.56	

* Impossible to get any record.
NOTE.—6 carbines used for the test at 100 and 300 yards, and 12 carbines for the 500 and 900 yards distance.

VELOCITIES.

Mean of ten rifle cartridges, Springfield Carbine.....	1337.5
Mean of ten carbine cartridges, Springfield Carbine.....	1167.6
Mean of five Winchester cartridges, Winchester rifle.....	1127.4

PENETRATION IN WHITE PINE AT ONE HUND YARDS

Names of Carbines and Rifles.	M of five Wt of W of Shots. Bullets. Powder	Inches. Grains.
Springfield, calibre 0.45	10.075	415 55
Spencer, calibre 0.50	6.35	315 55
Sharps, calibre 0.50	8.75	470 55
Winchester rifle, cal. 0.41	4.9	200 40

General Rosser replies at length to the letter addressed to him by Colonel Reno, of the 7th Cavalry, and which we published in the *Journal*, Aug. 12th. In substance, his letter is a criticism upon Reno for dismounting and taking to the timber, when his "loss was little or nothing." He says: "you had an open field for cavalry operations, and I believe that if you had remained in the saddle and charged boldly in the village, the shock upon the Indians would have been so great that they would have been compelled to withdraw their attacking force from Custer, who, when relieved, could have pushed his command through to open ground, where he could have manoeuvred his command, and thus greatly have increased his chances of success." General Rosser presents his theory of the engagement, accompanied by an explanatory map, and says:

At the verge of a high bank, the deep stream below, a vast city of Indians before him, your command retreating and the Indians rapidly accumulating in his front and on his flanks, Custer was forced to counter-march and begin his retreat, which he attempted in column of companies. The companies of Tom Custer and Captain Smith, being first in advance and last in the retreat, fell first in the slaughter which followed this retrograde movement, and were found as I marked the line upon the map. Yates' company, with its gallant captain, took up the position on the hill, where all perished, including Custer, the Murat of the American Army, and Cooke, Yates, Tom Custer and Riley, as I have indicated on the map; while a little further on, we found the remains of

Keogh's and Calhoun's companies, which perished while fighting their way back toward you—a few even reaching the place where Custer first struck the high banks of the river.

All of which statements are sufficiently answered by Col. Reno's official report and his letter, both of which we have published.

In answer to "Sharpnel's" inquiry as to postage rate on communications for the Press, we beg leave to refer him to our published notice immediately under the Editorial heading, he will there find the answer to his inquiry. The cover of a package marked "Printer's copy" must be entirely open at one end, so that the contents can easily be drawn out of the cover by the Postmaster to see that is what it represents itself to be. The postage on such packages is one cent per ounce.

WE have received from the Secretary, Dr. K. OLIVER, a copy of the Prize List of the Kingston Rifle Association, but at too late a date to be of any practical value to Rifle men generally, as the matches therein advertised come off today.

The Indian War.

A despatch from Fort Pierre via Fort Thompson, Dakota, reports, as confirmed the massacre of a party of five men near the head of the Scio, on their way to Black Hills, and also that rumours are afloat that two parties, one of fifty Black Hillers who came out to open the Fort Pierre route to Missouri River, and one of twenty men who went to the assistance of the former, had been surrounded by the Indians and the smaller party destroyed. The troops having been withdrawn from Fort Pierre, the miners are no longer detained till sufficiently large companies are formed for protection, but proceeded to the Hills in small parties and thus fall an easy prey to the savages.

General Custer's Remington rifle and the black horse he used to ride at Lincoln have been captured by some Black Hillers from a young warrior killed on the route to the Hills.

A despatch from Bismarck says: A letter from Standing Rock reports the arrival of an Indian from the hostile camp with a message from seven of the hostile chiefs. He says nothing about Sitting Bull, but claims having been with another much larger party. He reports the Indians abundantly supplied with food and arms and watching the men constructing the new post on Tongue River. The Indians at Standing Rock are very turbulent, many refusing to be contented, and others destroying relations issued to them.

CHETESNE, Sept. 16.—A courier who left Gen. Crook's command Sept. 10th, brings the following news: Col. Mills, with 150 men, discovered a hostile Sioux village consisting of forty one large lodges and several hundred ponies, which Mills attacked, and a fight ensued, in which Lieut. Von Leuturn, of Company C, was seriously wounded in the knee. Privates Medbury and Charles Foster, Company B; Augustus Dom, Company D, and Sergeant Glass, Company E, were wounded, and Private Wenzel, Company A, was killed. Word was sent to Crook, fifteen miles backward of the main column, and he came forward with sections from his cavalry. Crook had kept up a good picket fire during the forenoon, and was very much disappointed because Mills did not report his discovery last night, as there was plenty of time to have got up the entire command, and so effectually surrounded the village that nothing could have escaped.