

This article was downloaded by: [UQ Library]

On: 02 February 2015, At: 22:19

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered

Number: 1072954 Registered office: Mortimer House, 37-41

Mortimer Street, London W1T 3JH, UK



Royal United Services Institution. Journal

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rusi19>

Military

Published online: 11 Sep 2009.

To cite this article: (1893) Military, Royal United Services Institution. Journal, 37:186, 924-928, DOI: [10.1080/03071849309416923](https://doi.org/10.1080/03071849309416923)

To link to this article: <http://dx.doi.org/10.1080/03071849309416923>

PLEASE SCROLL DOWN FOR ARTICLE

Taylor & Francis makes every effort to ensure the accuracy of all the information (the "Content") contained in the publications on our platform. However, Taylor & Francis, our agents, and our licensors make no representations or warranties whatsoever as to the accuracy, completeness, or suitability for any purpose of the Content. Any opinions and views expressed in this publication are the opinions and views of the authors, and are not the views of or endorsed by Taylor & Francis. The accuracy of the Content should not be relied upon and should be independently verified with

primary sources of information. Taylor and Francis shall not be liable for any losses, actions, claims, proceedings, demands, costs, expenses, damages, and other liabilities whatsoever or howsoever caused arising directly or indirectly in connection with, in relation to or arising out of the use of the Content.

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden. Terms & Conditions of access and use can be found at <http://www.tandfonline.com/page/terms-and-conditions>

Company, and was a sample of the barbette plates for the battle-ship "Indiana," was put to a severe trial. It is the heaviest plate yet tested, its dimensions being 8 ft. 4 in. high by 12 ft. 1 in. long, and its weight $31\frac{1}{2}$ tons. It had three 850-lb. conical Carpenter shells fired at it from a 12-in. rifled gun, the muzzle of which was 319 ft. distant from the plate. The first shot, with 1,322 ft. velocity, penetrated 16.6 in.; the second shot, with 1,495 ft. velocity, went through the plate and also penetrated 3 in. into the oak backing; while the third, which had a velocity of 1,858 ft., went through the plate, through 3 ft. of oak backing, and through the earth behind, when it was deflected and lost, after ploughing away for a distance of several hundred yards. No cracks were shown under this terrific strain. Both consignments of plates were accepted, but the makers did not succeed in winning the premium of 30 dollars a ton offered, if punctuation were successfully resisted. The contract price is 675 dollars per ton. The four projectiles which were not lost showed no substantial injury. The energy of the heaviest shot was equal to 21,600 ft.-tons. The results have given great satisfaction. ("The Times.")

On June 10 the battle-ship "Massachusetts" was launched from Messrs. Cramp's yard at Philadelphia. She is of the same type as the "Indiana," which was launched from the same yard last March, and her sister ship the "Oregon." We hope before long to give full particulars of these three powerful battle-ships.

An electric launch has been built for the armoured cruiser "New York." This little craft is 30 ft. long, 6 ft. 10 in. beam, and her draught 22 in. She is to have a speed of 6 or 7 knots, is propelled by a screw, to which the motive force is imparted by a motor with 64 storage batteries, placed beneath the inner planking.

It is also proposed to employ electricity for working the turrets of the cruiser, and it has proved necessary to alter the arrangements for the magazines, which have been found to become dangerously heated in consequence of their vicinity to the stokeholds. ("Le Petit Var.")

MILITARY.

Austria-Hungary.—The new portable army tent, as proposed by the Technical Administrative Committee, has been finally approved. In the first instance it will be supplied to the dismounted troops, and subsequently to the cavalry and artillery. This tent, which weighs 16.3 lbs., is intended for two men, and is entirely carried by them in equal loads. It can be fixed as a closed tent or as a single screen against sun and wind. According to the "Allg. Mil. Zeitung," the equipment is to be tried by two infantry regiments during the great manœuvres in Hungary.

Belgium.—According to "La Belgique Militaire," the number of troop horses per squadron is to be raised from 125 to 135. It is proposed that in case of war 2 independent cavalry divisions shall be formed, each consisting of 16 squadrons; further, each infantry division would have attached to it a detachment of 2 squadrons, for which purpose the existing 5th squadrons would be used; and on mobilization fortress squadrons are intended to be raised. In order to provide for the latter formations, each regiment has, on paper only, a 6th squadron, for the manning of which a roll is constantly to be kept up of persons on the active and leave lists.

Denmark.—The "Neue Mil. Blätter" (quoting from "Das Pferd") gives the following account of experiments recently carried out in France, and subsequently in Denmark by Veterinary Surgeon Marlot, with the object of deciding whether horses should be fed before or after watering. As an animal is nourished not by what it merely eats, but by the food it digests, the first object of the experiments was to establish the effect on the process of digestion produced by the presence of a quantity of water in the stomach while the food was still there. In the Agricul-

tural School of the French Department of Yonne a horse was fed with 4 litres of oats and immediately watered. Shortly afterwards it was killed. About 1 litre only of oats was found in the stomach, swimming in the water, the rest having been washed into the intestines and so become lost for purposes of nourishment. A second horse was first watered and at once fed with 4 litres of oats. After a quarter of an hour it was killed, when the whole of the oats were found in the stomach, and were seen to be already under the influence of the digestive juices. Similar experiments conducted by Veterinary Surgeon Marlot, without the animal being killed, showed that a mass of undigested oats was always evacuated if water was given immediately after feeding. He therefore concludes that horses should always be watered before feeding, and further recommends that they should not be fed at once after work, but should first be allowed to rest a little, then given a little hay, and afterwards be fed with oats.

France.—The “Revue du Cercle Militaire,” No. 27, states that the infantry are about to carry out interesting and novel exercises in the use of explosives. According to the latest instructions for field work, each regiment of infantry, or battalion forming a corps, is to be exercised every year in the use of explosives for the destruction of railways and for demolitions of various kinds, and to this end each of the units specified is now allowed an annual supply of 100 pétards and 75 detonators. The details of the practical exercises to be carried out with this material are to be prescribed by the army corps commanders.

The provisions of the new law of cadres, adopted by the Chamber of Deputies on June 27, are given in full in the “Revue du Cercle Mil.,” No. 27.

The carrousel at the Cavalry School of Saumur will be held on August 21, and will be preceded and followed by a day of racing. To any one interested in the present state of military equestrianism in France, a visit to these exercises cannot fail to be instructive.

The “Spectateur Militaire,” of 15th July, commenting on the report on the recruiting operations of 1892, remarks as follows:—“It shows a sad diminution in the number of young conscripts. There were 22,822 fewer than in the preceding year (class of 1890), only 277,425 of the class of 1891 having drawn lots, as against 300,247 in the previous year. This constant diminution in the amount of our population is calculated to make all good Frenchmen uneasy. It demands imperiously the attention and study of philosophers and legislators. The causes of this decrease are various, and are intimately connected with considerations of morality and social economy. . . . We cannot but deplore, from the point of view of the contingent defence of our country, this progressive diminution of our resources in men. It is of no use to perfect our armament and raise new fortifications if we have not sufficient men to garrison the latter, and have not the means of raising field armies, if not superior, at least numerically equal, to those of the enemy.” Of the 277,425 men liable to service, after deducting exemptions, &c., from all causes, there were incorporated in the army 181,872. Under the head of education, the “Spectateur” remarks that, although the proportion of young men who can neither read nor write diminishes every year, it does so but very slowly, being still 7.05 per cent. in 1892, a fact which is difficult of explanation in view of the law regarding obligatory primary instruction. This subject was alluded to in our Military Notes for March, in which also will be found, for purposes of comparison, the percentages of illiterates in the German and Russian armies (0.45 and 0.67 respectively).

In previous “Notes” attention was called to the fact that medical officers are no longer permitted to undertake private practice. A similar restriction has now been placed upon the fencing instructors of the army. In consequence of civil professors having objected to the military instructors competing with them in private practice, commanding officers have received instructions not to authorize

their *maitres d'armes* to give lessons to civilians, except upon the demand or official assent of the mayors of towns, &c.

"La France Militaire," No. 2472, gives interesting details of experiments which have been conducted in the Laboratory of the Intendance Committee, in Paris, with the object of determining the suitability of aluminium vessels for containing liquids, articles of food, &c. Pure aluminium seems to be hardly affected by even sour liquids, but the presence of the small quantity of iron which is nearly always present in the best commercial aluminium seems to favour chemical action, and produces slight discoloration of some liquids. Wine, beer, cider, and other liquids were left for months in contact with the metal, and were not injuriously affected, and although the metal was slightly eaten away in most cases, the conclusion was arrived at that aluminium vessels could be used with safety for drinking bottles and culinary articles. Soup and cooked meat can be left in such vessels for 24 hours without any apparent effect, and in any case less effect was produced on aluminium by the various liquids experimented with than on the metals in ordinary use, such as iron, copper, zinc, and tin. Lengthened exposure to the atmosphere appears to produce no effect, so that in this respect there is thought to be no obstacle to the extensive use of the metal for an almost endless variety of military purposes.

Germany.—The "Rev. Mil. de l'Étranger" for June gives a short account, taken from the "Hamburger Nachrichten," of the guns exhibited by the Krupp works at the Chicago Exhibition.

According to the 21st Report of the Kriegerbund (Association of Veterans) the association numbers 194 groups, comprising 7,954 societies throughout the Empire, and a total of 657,438 members.

Recently published statistics seem to indicate a check, if not a positive decline, in the development of the German population. It would appear that the number of children under 10 years of age has decreased by $4\frac{1}{2}$ per cent. in the ten years from 1880 to 1890, and as there has been no increase in infantile mortality during that period, it follows that the number of births must have diminished. ("Rev. du Cercle Mil.")

The following extract from the proposed law regarding the peace strength of the German Army contains the provisions which are of most general interest:—

Art. 1. The peace effective of the German Army in men and lance-corporals for the period from 1st October, 1893, to 31st March, 1899, is fixed at 479,229 as a yearly average. One year volunteers, under-officers, officers, surgeons, and officials are not included in these numbers.

From the 1st October, 1893, the infantry will be formed in 538 battalions and 173 half-battalions, the cavalry in 465 squadrons, the field artillery in 494 batteries, the foot artillery in 37 battalions, the pioneers in 23 battalions, the railway troops in 7 battalions, and the train in 21 battalions.

Art. 2 provides, among other things, that during the period of their liability to service in the standing army the men of the cavalry and horse artillery are bound to serve with the colours without break for the first three years, all other men for the first two years.

The "Spectateur Militaire" states that a number of *teates-abris* have recently been manufactured under the orders of the War Ministry, which are presumed to be intended for the use of the cavalry. They are said to be sufficiently large to cover not only men but their horses also.

According to the same journal, a scheme will come into operation in the autumn for instructing a certain number of officers and intendance officials as interpreters.

Officers of troops garrisoned to the east of the Elbe will be taught Russian and Polish, and officers of other corps French. Each army corps will receive a special allowance for this purpose. Examinations will be held in the spring of every year under the superintendence of the Chief of the Great General Staff. The candidates for interpreterships will be required to write an essay and to carry on a conversation in the language studied, and passed interpreters will be required to undergo a fresh examination in the language every five years. Those who possess special aptitude will be eligible to receive allowances to enable them to visit the country concerned.

The new military law was accepted by the Reichstag on the third reading by 201 against 185 votes. The "Rev. du Cercle Militaire" gives the following table, taken from the Supplementary Budget, showing what will be the effective of the German Army in the last six months of 1893-94, the figures in parentheses being the augmentation resulting from the new military law (included in the preceding numbers):—

Officers	22,458 (1,796)
Under-officers.....	77,864 (10,912)
Men.....	479,229 (59,193)
Medical officers.....	2,068 (228)
Paymasters, veterinary surgeons, armourers, saddlers, &c.....	2,833 (433)
All ranks.....	584,452 (72,567)

The following vacancies were occasioned in the last six months in the German army by death or retirement. These details are of interest, as showing the many changes now going on among the superior officers of the German army:—

Generals.—10 (including the commanders of the Guard, IVth, VIIth, and Xth Army Corps, the Inspector-General of Foot Artillery, the Governor of Cologne, and the Commandant of Berlin).

Lieutenant-Generals.—11 (including the commanders of the 4th, 10th, 13th, 29th, 34th, and 35th Divisions).

Major-Generals.—24 (including the commanders of the 7th, 8th, 12th, 13th, 16th, 23rd, 32nd, 35th, 36th, 40th, 41th, 49th, 68th, 69th, and 72nd Infantry Brigades, the 2nd Guard, 12th, 13th, 30th, and 37th Cavalry Brigades, and the 17th Field Artillery Brigade).

Colonels.—20 infantry, 10 cavalry, 1 artillery, and 2 engineers (including the commanders of the 1st, 16th, 28th, and 34th Cavalry Brigades).

Italy.—The War Minister has decided that the velocipedes which were issued to the troops for experimental purposes are to be retained by them and permanently taken on the establishment of field equipment. ("L'Esercito Italiano.")

Spain.—The question of the armament of the Spanish troops has at last been settled, and the "Rev. du Cercle Militaire" gives the following *résumé* of the decree signed by the Queen Regent, dated 21st June:—The artillery is authorized to purchase directly from Messrs. Loewe, of Berlin, 20,000 rifles and 50,000 carbines of the Spanish Mauser system M/1892, and 10 million cartridges for the same, and in virtue of this purchase the Government acquires the right to manufacture 50,000 rifles of the same system at the national factory of Oriedo.

The Marine Infantry has recently been reorganized. The details of the new organization are given in the "Revue du Cercle Militaire," No. 30.

Switzerland.—The fortress artillery will in future be provided with aluminium water-bottles and wooden drinking-cups.

The "Rev. du Cercle Militaire," No. 30, quoting from the "Allgemeine Schweiz. Mil. Zeitung," gives an interesting account of the Krnka-Hebler tubular bullet. The most satisfactory form of the projectile is said to be conical at both ends, the width of the central tube being about two-fifths of the calibre. Fired from the German rifle M/88, the relative resistances in the air of various bullets experimented with were as follows:—

1. Ordinary bullet	1,000
2. Solid bullet, with flat base and ogival point.....	541
3. " " with both ends ogival.....	216
4. Tubular bullet " " "	89

Fired from the rifle of 5 mm., and with an initial velocity of 750 m., these figures were respectively 1,000, 463, 285, and 66. The improvement in flatness of trajectory is shown by the following figures:—At 1,000 m. with the German rifle M/88, of 7.9 mm., the beaten zone with the ordinary bullet is 42 m., and with the same rifle the tubular bullet gives a beaten zone of 218 m., but with the rifle of 5 mm. calibre, the tubular bullet gives a beaten zone of 400 m., or ten times that given by the German rifle and bullet in actual use. Owing to the diminished weight of the bullet, the gas pressure and recoil are considerably reduced. It is stated that a very trifling alteration (chiefly in the sights) is required in order to enable the new projectile to be used in existing small-bore rifles.

The annual report of the Swiss Military Department for 1892 speaks in the highest terms of the tinned meats produced by the manufactory at Rorschach (St. Gall), the superiority of which over the American and Argentine preserved meats appears to be fully established. The dislike to these rations hitherto shown by the troops is rapidly disappearing, and, indeed, the tinned meats are much appreciated in the central and eastern parts of the country. The same success has not attended the issue of the excellent biscuits which are occasionally substituted for part of the bread ration, but it is confidently expected that in course of time the prejudice against them will gradually disappear. These biscuits are manufactured by the "Anglo-Swiss Biscuit Company, at Winterthur."

FOREIGN PERIODICALS.

MILITARY.

Militär-Wochenblatt.—No. 58. "Advanced Positions in the past and in the future." "Promotion in the Russian Army." "Horse Breeding in France." No. 59. "Advanced Positions in the past and in the future" (*continued*). "Von Löbell's Jahresberichte." "The New French Law of Cadres." "What is the best way of incorporating the young Remounts, and of protecting them from Influenza?" No. 60. "The Wars of Frederic the Great" (criticism of the work issued by the Great General Staff). "Advanced Positions in the past and in the future" (*concluded*). "The Summer Exercises of the Troops in the Military District of St. Petersburg." "The Pattern Cavalry Barracks at Vincennes." No. 61. "An Officer's Expenses 200 years ago." "The French Naval Budget for 1894." "The New Swedish Army Organization." No. 62. "Thoughts on the Training of Cavalry." "Remarks on Krupp's Catalogue for the Chicago Exhibition." "The Supply of the Troops in the Russian Fortresses on the Western Frontier." "Remarks on the Article, 'Horse Breeding in France,' in No. 58." No. 63. "The Musketry Instructions for the New Russian Rifle." "Notes on the Danish Army