

addition to these main departments, the director of the great orphan asylum at Potsdam, the chief commission for the examination of employes of the intendancy, and the general military chest, are all under the direct control of the war ministry.

Under the direction of the Department of Military Economy there is in each army corps, and in each division, an *intendancy*, which has charge of all matters pertaining to provisions, forage, pay of the troops, garrison, hospital, and camp equipage and stores, transportation trains, equipments, reserves of clothing, etc., etc. Under the orders of the corps *intendant* is the train battalion, which will presently be described.

THE MEDICAL STAFF.

This is under the supervision of the medical department of the war ministry, at the head of which is the surgeon general. Each hospital is administered by a commission consisting of one officer of the line, a surgeon, and an inspector.

MILITARY JUSTICE.

The affairs of this department are under the direct supervision of the "General Auditoriat," which is itself immediately responsible to the second section of the General War Department, and has immediate control of the corps, division, garrison, regimental, and battalion auditors (judge advocates, very nearly), as well as of the various courts-martial and courts of honor.

MILITARY CHURCH AFFAIRS.

There is a Protestant and Catholic chaplain general, under whom are all the chaplains, and who are themselves responsible to the second section of the General War Department.

THE TRAIN BATTALIONS.

For each army corps there is a train battalion, which has the immediate charge of the main supply train, and other duties. In peace each battalion consists of 10 officers, 226 non commissioned officers and men, 121 horses, and 24 wagons. In war the strength is so much increased that as a minimum organization it consists of—

1. Five provision columns, each made up of 2 officers, 1 paymaster, 27 soldiers, 74 train soldiers and mechanics, 1 veterinary surgeon, 164 horses, 32 wagons.

2. Three sanitary detachments, including three detachments of men for carrying the wounded. Each sanitary detachment consists of three officers, 1 paymaster, 149 men, 7 surgeons, 45 other persons, 41 horses, 10 wagons, and 15 hand litter, and is organized in two sections, which can serve independently. One detachment is assigned to each division of infantry, and one to the corps of artillery. The men detailed to carry the wounded are infantry soldiers, who are instructed in their duties in time of peace.

3. A horse *dépôt*, with 2 officers, 31 men, 1 wagon, and 170 horses. The object of this *dépôt* is only to supply losses among the animals in use among the infantry, pioneers, administration, and head quarters. In an enemy's country the *dépôt* is kept up by requisitions. In the field all horses temporarily unserviceable, all supernumerary and captured animals, are turned over to the *dépôt*.

4. A field bakery column, consisting of 1 officer, 100 bakers, 12 men, 15 horses, and 2 wagons.

5. A train escort squadron, consisting of 6 officers, 116 men, 119 horses, and 1 wagon. The staff of the train battalion is at the

corps head quarters, and including this staff, the minimum war strength is 30 officers, 1455 men, 1257 horses, 195 wagons.

Under the commander of the train battalion of a corps are placed all the military *personnel* connected with the administration. In addition to the soldiers composing the train battalions, there are other train soldiers assigned to the troops, as drivers of baggage and ammunition wagons, etc. The average allowance of such wagons for a battalion of infantry is as follows, viz. :

1 Ammunition wagon, drawn by..	6 hor's
1 clothing wagon, drawn by.....	4 " "
1 Medicine cart, drawn by .....	2 " "
1 Officers' baggage wagon, drawn by 4	" "
With pack-saddles.....	4 " "

Total, 3 wagons, 1 cart, and.. 20 hor's.

The ammunition wagon carries about 18,000 cartridges, and to it are attached 5 picks, 12 axes, 10 spades, etc. The clothing wagon contains the battalion chest, the account books, some spare clothing, and tailors' and shoe makers' tools. The officers' baggage wagon contains the portmanteaus of the officers and employes (each lieutenant is allowed 42 pounds, each captain 51 pounds, the battalion commander 94 pounds), the mess apparatus of the staff, the adjutant's papers, and the armorer's tools. The pack horses—one for each company—carry the officers' mess apparatus and cloaks, 10 blankets for the sick, some tailors' and shoe makers' tools, the orderly sergeant's papers, and the company money; in all about 200 pounds.

For a battalion of rifles the arrangement is somewhat varied, horse carts being substituted for wagons, to enable them to accompany the command over bad roads and open ground. They have—

4 Ammunition carts, with.....	8 hor's.
4 Baggage carts, with.....	8 " "
1 Medicine cart, with.....	2 " "
1 Staff baggage cart, with.....	2 " "
Pack-horses.....	4 " "

Making 10 carts and..... 24 hor's.

Each ammunition cart carries 7840 cartridges. Including the drivers of the baggage wagons, etc., the total war strength of a battalion of infantry is 22 officers, 1028 men, 34 horses, 4 wagons and carts. Of a rifle battalion the strength is 22 officers, 1034 men, 40 horses, 10 carts. And the total war strength of a regiment of infantry is 69 officers, 3112 men, 121 horses, 16 wagons and carts.

The baggage of a cavalry regiment consists of—

1 Medicine cart, with.....	2 hor's.
1 Forge, with.....	2 " "
4 Baggage carts, with.....	8 " "
1 Officers' baggage cart, with.....	4 " "

Or 7 carts and wagons and 16 hor's.

Making the total strength of a cavalry regiment on the war footing 23 officers, 633 men, 705 horses, 7 wagons and carts.

(To be Continued).

TOWN OF MORRIS.

We have been shown a map of the above new town, recently surveyed into town lots by C. I. Brown Esq., F. L. S. of Winnipeg. We understand that Messrs. Kennedy, Mulvey & McMillen are the proprietors. On inspection of the map, as also that of the Province, and from its excellent capabilities the

town of Morris offers fair to become second only to Winnipeg in the course of a short time. It is situated at the confluence of Scratching River with Red River, in the parish of St. Agathe, and in the very centre of the extended county of Provencher, being forty miles distant from the city of Winnipeg, and twenty this side of Pembina. The stage road to Winnipeg passes through the centre of the town, and it has the advantage of Kattson's line of steamers which call regularly at the place. The large thriving settlements of the Boyne are only sixteen miles distant, and already Morris is made the base of supplies to all these thriving settlements as far as Pembina Mountains. On the East side of Red River, and a few miles distant, is the reservation set apart for the Mennonites and for the reception of the many hundreds already on their way, new buildings are in course of erection for their accommodation.

Any person acquainted with the excellent quality of the soil between Winnipeg and Pembina, and seeing the facilities for wood and water that exist, must confess that between Winnipeg and the boundary line at Pembina, is destined to become the most populous and flourishing part of the whole Province. Unlike new towns and villages west of us, Morris is destined to have the advantages of Railway accommodation at a very early day, as the line from Pembina will certainly pass on the opposite side of the river, if not through the place should it pass on the West side. There is a Bill through the Legislature, and passed through the 3rd reading, asking for a charter for the construction of a Railway from Fort Garry to Morris, and thence westerly to the western limit of the Province. The place already contains a large tavern, two stores, a post office, a school house, and steps are being taken for the erection of a tannery, tavern, and grist mill. Already, we are informed, that upwards of fifty lots have been disposed of at one hundred dollars each. Those wishing to purchase can inspect the plan, or procure any information desired, by calling at the office of Mr. Mulvey.

We congratulate the above gentlemen in their enterprise, and wish the town of Morris all the success which most assuredly awaits it.—The *Nor Wester*, July 20th.

Dr. Neumayer has recently exhibited before the Berlin Geographical Society a photographic apparatus designed for the determination of the temperature and of the currents at great depths in the ocean. The invention is composed of a copper box, hermetically sealed and furnished with an exterior appendix made like a rudder. In the interior is a mercury thermometer and a compass, each enclosed in a glass receptacle into which sro admitted traces of nitrogen gas. A small electric battery completes the apparatus. When the latter is allowed to descend attached to a sounding line, the action of the current on its rudder causes it to assume a parallel direction, thus indicating the set of the flow by the relative position of compass, needle, and rudder. The thermometer of course shows the surrounding temperature. In order to fix these indications, a piece of photographic paper is suitably disposed near the glass cases containing the instruments. Then at the proper time a current of electricity is established through the gas in the receptacles, causing an intense violet, capable of acting chemically upon the paper for a sufficient length of time to allow of the