

ORGANIZATION OF THE GERMAN ARMY.

CHAPTER I.

MILITARY SERVICE.

LIABILITY TO MILITARY SERVICE.—Under the law of the Empire every male German, unless he be a member of a reigning or mediatized house, is liable to enrollment in the military service. This liability, which cannot be satisfied by a substitute, and from which persons convicted of crime are excluded, begins with the completed 20th and ends with the completed 45th year. It is divided into the liability to service in (1) the army or navy and (2) the landsturm. The former, embracing, as a rule, the period from the completed 20th year of the subject to March 31 of the year in which he completes his 39th year, is again divided into liability to serve as follows:

- (1) The active army.
 - (2) The reserve.
 - (3) Landwehr.
 - (4) Ersatz reserve.*
- } Service in the standing army.

Persons belonging to either of the three last-mentioned classes, except such as form the landwehr of the second levy, constitute, when not with the colors, the so-called "furloughed state" (*Beurlaubten Stand*). During peace they are assembled once or twice a year for muster, and are required to report each change in their address to the commanding officer of the district in which they reside.

SERVICE IN THE STANDING ARMY occupies seven years, of which three years (mostly from the completed 20th to the completed 23d year) are generally spent with the colors, and four years (mostly to the completed 27th year) in the reserve.

Men of the reserve may be subjected to two trainings of eight weeks each, and required to join their companies for this purpose. In war the reserve reenforces the active army.

THE LANDWEHR is divided into two levies. The liability to service in the first lasts five years, and, as a rule, embraces the period from the 27th to the 32d year. In the second levy it continues to March 31 of the year in which the man completes his 39th year. Landwehr men of the first levy join a regiment of the active army within the district of their residence for one week's training during each of two years of their term. In war the landwehr (infantry and cavalry) is either formed into separate organizations or merged into ersatz organizations, which supply vacancies in the field army. Of these organizations mention will be made further on.

THE ERSATZ RESERVE consists of persons who, though qualified (or but slightly disqualified) for the military service, have not been—being supernumerary or for some other reason—enrolled in the standing army. The liability to service in the ersatz reserve lasts twelve years, beginning with October 1 of the year in which the 20th year is completed. Of the ersatz reservists only a part are during peace subjected to a brief training on three

* *Ersatz*, signifying the supply of vacancies, or of some kind of deficiency, is a German expression, for which an equivalent English word does not exist.

separate occasions not exceeding twenty weeks in all, and these enter the landwehr of the second levy on the expiration of their term. All the others are passed to the landsturm of the first levy. On mobilization the men of the ersatz reserve join "ersatz" or depot organizations. The seven junior annual contingents of the ersatz reserve are supposed to contain a sufficient number of men to bring the standing army to a war footing.

THE LANDSTURM consists of all persons liable to military service between the ages of 17 and 45 years who are not enrolled in the army or navy. It is divided into two levies—the first, comprising all such persons up to March 31 of the year in which they complete their 39th year, and the second all the remainder. In peace the landsturm is not subjected to a muster or training of any kind. It is not, in fact, a constituent part of the army proper, but when called forth for the defense of the country during war, as it may be by the Emperor, or in case of exigency by a commanding general, or the "Gouverneur" of a fortress, its members are required to wear a distinctive badge, recognizable at a distance, to bring them within the international definition of lawful combatants.

EXCEPTIONS TO THE RULES TOUCHING COMMENCEMENT AND LENGTH OF SERVICE IN THE ACTIVE ARMY.—The law authorizes some exceptions to the above rules, which are based upon a desire to avoid interference with scientific, artistic, and industrial training, or to prevent undue hardship, such as would result if a youth upon whom others depend for support, or for the conduct of an important business, were drafted into the military service. Young men coming up to a certain educational, professional, or technical standard, who have the means of uniforming, equipping, and subsisting themselves, may join a regiment of their choice between their 17th and 20th years, and are furloughed to the reserve after but one year's service with the colors. In passing, it may be pointed out that it is from this class of "one-year volunteers" (*Einjährige Freiwillige*) that the bulk of the reserve and landwehr officers are drawn. In other cases, notably of persons of insufficient bodily development, or whose training in a particular art or industry cannot be interrupted without detriment, enrollment in the active army is deferred for from one to five years, generally for only one year at a time. On the other hand, service with the colors may be prolonged in the following cases:

(1) Pupils of military educational institutes are obliged to serve longer than the regular term with the colors.

(2) Noncommissioned officers and soldiers who wish to serve beyond the established term may reenlist—as a rule for one year at a time—if their commanding officer wants to retain them.

(3) Periods of confinement exceeding six weeks are not counted as service.

The above rules respecting liability to military service apply to a state of peace. In time of war men are not passed from the standing army to the landwehr, nor from the latter to the landsturm.

* "Mobilization" is the transfer of individual soldiers or military organizations from a peace to a war footing. A regiment or army is said to be "mobile" or "mobilized" when upon a war footing; it is immobile or demobilized when it has not yet been placed on such footing, or when it has been restored to a peace footing.

CHAPTER II.

PEACE STRENGTH.

LEGISLATION IN REFERENCE TO THE PEACE STRENGTH OF THE ACTIVE ARMY.—At this point it may be of interest to glance at the legislation touching the peace strength of the active army at various times since the creation of the German Empire.

In 1871 the Reichstag of the Empire, sitting for the first time, fixed until 1874 the strength of the active army at 1 per cent of the population of 1867, and appropriated for the support of the army at the rate of \$161 per head, adopting in this respect the rule established in 1867 by the Reichstag of the North German Confederation. To keep within this scanty appropriation the Government* was compelled, however, much against its wishes, to defer for one or more months the calling in of the recruits and to furlough men to the reserve after only two years' service, so that at times the men actually with the colors fell short by as much as 11 per cent of the authorized number. It, therefore, insisted in 1874 that thereafter the peace strength present should be fixed, without limit as to time, at 401,659 (1 per cent of the population of 1867), and that instead of a lump sum, the amount of the actual expenses of maintaining a force of this size be annually determined and appropriated by law. After considerable wrangling it carried its point, except that the numerical strength was fixed for seven years, namely, until 1881, instead of for an indefinite period.

In 1880, when this time was about to expire, the Government succeeded in getting the Reichstag to authorize for seven years longer (to April 1, 1888,) a strength of 427,274, said number being 1 per cent of the population as determined by the last quinquennial census—that of 1875. But it dissolved the Reichstag when that body refused to accede to its demand, presented more than a year prior to the expiration of this last mentioned period, that on the basis of 1 per cent of the population, as determined by the census of 1885, a strength of 468,419 be authorized for another septennate. The new Reichstag yielded to the full demand of the Government, which in the summer of 1890 requested and obtained for the remainder of the septennial period—this time irrespective of the result of the census, which was not known until December 1, 1890—a further increase of the peace strength to 486,983.

The above number of the peace strength, as fixed upon in 1890, does not include the officers (20,524), the military physicians (1,837), paymasters and military music inspector (893), veterinarians (559), armorers (855), saddlers (93), the one-year volunteers (9,000), ersatz reservists called to the colors for drill, nor soldiers recalled from the "furloughed state" for a similar purpose. Reduced to a basis of one year's service in the ranks the number of men of the two last-mentioned classes would average 22,000.

The following statement exhibits the increase in the peace strength, both of the several military contingents under separate administration, and of the army as a whole, that will eventually result from the operation of the law enacted by the Reichstag, which was convened in extra session, July 4, 1893 :

* Equivalent in Germany, where the representatives of the people are not regarded as part of the Government, to what in the United States would be termed the "administration."

STATES:	Officers.	Military physicians.	Paymasters.	Armores, etc.	Veterinarians.	Noncommissioned officers.	Privates.	Horses.
Prussia	1,446	180	162	161	17	8,554	46,247	2,590
Saxony	116	14	13	13	-----	870	5,468	132
Württemberg	50	8	8	8	1	320	1,948	132
Bavaria	181	26	24	24	2	1,168	5,535	240
	1,793	228	207	206	20	10,912	59,198	3,094

	Noncommissioned officers.	Privates.	Total.
The former peace strength amounted to	66,952	420,031	486,983
Add privates as above		59,198	
Future peace strength exclusive of noncommissioned officers		479,229	
Add noncommissioned officers as above	10,912	-----	557,093
Total number of noncommissioned officers in future	77,864	-----	

ANNUAL COST OF THE MILITARY AND NAVAL ESTABLISHMENTS, 1872-'93.

The gradual increase in the cost of the German military and naval establishments since the close of the last war with France, is exhibited in the following table, which is also of interest as showing the very small amounts that are expended for pensions, considering the strength of the German army and the recency and magnitude of the wars in which Germany and the several states now composing the German Empire have been engaged:

YEARS.	CURRENT EXPENSES FOR--			TOTAL.	Extraordinary expenses for army and navy.	Total of current and extraordinary expenses.
	Army.	Navy.	Pensions.			
	<i>*Million Dollars.</i>	<i>*Million Dollars.</i>				
1872	59	3	11	73	58	131
1873	63	3	10	76	38	114
1874	63	3	10	76	36	112
1875	76	4	11	91	47	138
1876	76	4	11	91	24	115
1877, 1st qr	19	1	3	23	6	29
1877-'78	77	5	11	93	22	115
1878-'79	76	5	11	92	23	115
1879-'80	75	5	11	91	18	109
1880-'81	78	6	11	95	14	109
1881-'82	81	6	11	98	15	113
1882-'83	81	6	11	98	9	107

* Approximate.

YEARS.	CURRENT EXPENSES FOR—			TOTAL.	Extra-ordinary expenses for army and navy.	Total of current and extra-ordinary expenses.
	Army.	Navy.	Pensions.			
	*Million Dollars.	*Million Dollars.	*Million Dollars.	*Million Dollars.	*Million Dollars.	*Million Dollars.
1883-'84 ----	80	6	11	97	9	106
1884-'85 ----	81	7	11	99	11	110
1885-'86 ----	80	9	11	100	12	112
1886-'87 ----	81	8	12	101	16	117
1887-'88 ----	85	9	12	106	43	149
1888-'89 ----	86	9	13	108	48	156
1889-'90 ----	90	9	14	113	42	155
1890-'91 ----	95	10	15	120	83	203
1891-'92 ----	100	10	16	126	26	152
1892-'93 ----	101	10	16	127	44	171
	1,703	138	253	2,094	644	2,738

*Approximate.

PENSIONS.—It may be remarked in passing, by way of explanation of the comparatively small outlay of the German Government on account of pensions, that disability is not regarded as traceable to an incident of the service unless it has appeared and been demonstrated to the military authorities within six years of the close of the war in which the applicant took part, and that the pension bureau is administered by the War Ministry and its officials.

ORGANIZATION AND AGGREGATE STRENGTH OF THE VARIOUS ARMS AND CORPS.

In 1874 the number of the organizations of the several arms and corps, which had been previously determined at the pleasure of the Government, was for the first time fixed by law. *Pari passu* with the increase in the peace strength in the years 1881, 1887, and 1890, the Reichstag provided for an increase in the number of organizations. At present the Army of Germany, exclusive of the physicians, paymasters, veterinarians, armorers, one-year volunteers, etc., above enumerated (aggregating about 26,237), and of other officials and their assistants, such as judge-advocates, intendants, chaplains, etc., performing semi-civil functions, is made up as follows:

(1) Infantry—11,554 officers and 333,729 men; divided among 173 regiments=519 battalions; 19 battalions, rifles; 278 headquarters of enrollment districts; the instruction battalion at Potsdam; the noncommissioned officers' schools; the school of musketry.

(2) Cavalry—2,350 officers, 65,311 men, 63,620 horses; contained in 93 regiments=465 squadrons; 3 schools of equitation.

(3) Field Artillery—2,369 officers, 48,384 men, and 26,104 horses; serving at the school of gunnery for field artillery, and in 43 regiments=434 batteries.

(4) Foot artillery—728 officers, 17,159 men, and 30 horses; serving at the school of gunnery for foot artillery; in the company attached to the proving ground of the artillery commission, and in 14 regiments = 26 battalions, and 3 battalions (independent).

(5) Pioneers, railway troops, including aerial navigation division—558 officers and 12,719 men; serving in 20 pioneer battalions; 2 railway regiments = 4 battalions; 1 railway battalion (independent) and 2 railway companies.

(6) Train—299 officers, 6,836 men, and 3,996 horses, divided among 21 battalions.

(7) Special formations—441 officers and 2,772 men; serving in the palace guard company, body guards, intendancies, military educational establishments, disciplinary, and labor companies, etc.

(8) Officers not belonging to regiments, such as general officers, general staff and adjudantur officers, officers on duty in the War Ministry, etc.—2,195.

VARIATION OF THE STRENGTH OF ORGANIZATIONS WITHIN THE SAME ARM.—The authorized strength of the different organizations varies even within the same arm, according as the troops belong to the guard or line, or are stationed in the interior or on the frontier of the country. Accordingly, organizations are officially announced as having a low, medium, or high peace establishment, the maximum number and the number of recruits annually allowed to each being as follows:

Infantry battalion, high establishment, 22 officers, 660 men, including 584 vice corporals and privates (244 recruits).

Infantry battalion, medium establishment, 18 officers, 600 men, including 532 vice corporals and privates (228 recruits).

Infantry battalion, low establishment, 18 officers, 560 men, including 496 vice corporals and privates (209 recruits).

Rifle battalion, high establishment, 22 officers, 681 men, including 584 vice corporals and privates (232 recruits).

Rifle battalion, medium establishment, 22 officers, 620 men, including 532 vice corporals and privates (216 recruits).

Rifle battalion, low establishment, 22 officers, 555 men, including 472 vice corporals and privates (199 recruits).

Cavalry regiment, high establishment, 25 officers, 731 men, including 613 vice corporals and privates (160 recruits).

Cavalry regiment, medium establishment, 25 officers, 701 men, including 583 vice corporals and privates (150 recruits).

Cavalry regiment, low establishment, 25 officers, 686 men, including 573 vice corporals and privates (150 recruits).

Field battery, high establishment, 4 officers, 119 men, including 98 vice corporals and privates (38 recruits).

Field battery, medium establishment, 4 officers, 111 men, including 91 vice corporals and privates (35 recruits).

Field battery, low establishment, 4 officers, 100 men, including 80 vice corporals and privates (30 recruits).

Horse battery, high establishment, 4 officers, 120 men, including 100 vice corporals and privates (35 recruits).

Horse battery, medium establishment, 4 officers, 112 men, including 93 vice corporals and privates (32 recruits).

Horse battery, low establishment, 4 officers, 91 men, including 74 vice corporals and privates (25 recruits).

Foot artillery battalion, high establishment, 20 officers, 590 men, including 490 vice corporals and privates (210 recruits).

Foot artillery battalion, low establishment, 20 officers, 480 men, including 385 vice corporals (168 recruits).

The pioneer battalion has but one establishment, namely: 28 officers, 509 men, including 417 vice corporals and privates (176 recruits).

The batteries of the low establishments have 4-horsed guns, those of the medium establishments have 6-horsed guns, and those of the high establishments have 6-horsed guns and in addition 2-horsed ammunition wagons.

For more complete information respecting the distribution of officers*, officials, noncommissioned officers, and men among the several arms, corps, educational establishments, etc., attention is invited to a table contained in, and forming the basis of, the army appropriation act for the fiscal year 1892-93, published in book form.

Three infantry battalions, each composed of 4 companies, constitute a regiment; a brigade is as a rule formed of 2 regiments. Five squadrons form a regiment of cavalry, 2 regiments as a rule a brigade. A field artillery brigade, to which a train battalion of 3 companies is attached, consists for the most part of 2 regiments. One of these, usually that bearing the lower number, is generally composed of 3 battalions,* of which two contain 3 field batteries each, and the third 2 horse batteries. The other regiment is composed of 3 battalions containing 3 field batteries each. A foot artillery regiment consists of 2 battalions of 4 *companies* each (not termed "batteries"). A pioneer battalion numbers 4 companies. Foot artillery and pioneers are not united in larger bodies than regiments and battalions respectively.

*The German name for the principal subdivisions of a field artillery regiment is *Abtheilung* (pl. *Abtheilungen*), signifying division, partition, etc. As the use of "division" would lead to a confusion in terms, "battalion" has been considered the most convenient substitute for it, although some authorities hold that the latter word is in strictness applicable only to a body of infantry.

CHAPTER III.

OFFICERS.

PRINCIPLES GOVERNING THE PROMOTION OF OFFICERS.—The conditions under which appointments are made to the lowest commissioned grade (that of second lieutenant) in the active army will be discussed hereafter, but this seems to be the proper place, before indicating the functions devolving upon the company, battalion, and the higher commanders, to explain briefly the principles governing promotion, which, not being fixed by law or set forth in orders or regulations, must be gathered from the prevailing practice. Promotion of officers up to the grade of captain is habitually based upon seniority, though the sovereign frequently exercises his unlimited power in the matter of promotions and assignments to advance meritorious officers, especially those who have qualified for the general staff or the higher adjutantur, over the heads of others. In the rifles, officers are promoted by battalion, and in the pioneers and engineers, by battalion or by “inspection”* according as the officers are serving with pioneer battalions or employed in connection with the construction of fortifications. In the train, promotion is throughout the arm, but this rule does not apply to the two train depot officers that are attached to each train battalion, and who are usually selected from lieutenants of the army no longer fitted for active service, and who do not rise above the rank of captain.

Above the grade of captain officers are promoted within the arm or corps, and here the rule of seniority is rarely, if ever, departed from even in favor of the general staff officer. The seniority principle in the cases of field officers is carried so far that an officer for whom a vacancy in the next higher grade in his arm exists is not promoted thereto until all his seniors in the other arms have been advanced to that grade. It thus happens, particularly in the cavalry, which is not divided into battalions, that a lieutenant colonel, and even a major, is the permanent commander of his regiment, for the reason that there are still one or more officers of his grade in the other arms who rank him. Inasmuch, however, as the position of regimental commander is one of great dignity and entails considerable expense, being “representative,” as the Germans put it, the tenure of it by an officer of inferior rank would involve pecuniary hardship, were it not for the fact that the German system recognizes promotion in command, as well as in grade, the two, especially in the cases of the higher officers, being quite independent of each other, and pay and allowances being determined by the former rather than by the latter.

OVERSLAUGHING OF AN OFFICER; ITS EFFECT.—Once a captain, an officer who is overslaughed by a junior must retire from the active army. An officer whom his superiors have determined upon retiring because in their opinion he does not fulfill the moral or professional requirements of his position is always given an intimation of the fact beforehand, in order that he may spare himself the humiliation of an expulsion from the active army by a timely request to be permitted to withdraw therefrom. The hint is almost always taken and peremptory dismissals for general inefficiency are hardly known. The disposition made of

*The term “*Inspektion*” is used in German, not only as signifying the act of inspecting, but also as decriptive of the persons collectively who are employed, directly and indirectly, in overseeing the organization, institutes, etc., of special arms. Thus the “general inspection” of foot artillery consists of the inspector general (its head), his adjutants, the clerks, and other subordinate personnel attached to it.

an officer thus eliminated from a command depends upon the circumstances of the case. He may be employed in the gendarmerie, military prisons, invalid houses, etc., on higher so-called titular rank without extra pay, or he may be merely pensioned. Comparatively few officers fail to obtain their promotion to major (battalion commander) in their regular turn; but the crucial point is reached when an officer gets to the top of the list of field officers not assigned to the command of a regiment, and he may esteem himself fortunate and regard himself as thoroughly efficient if he weathers this point and becomes a regimental commander.

ASSIGNMENT (PROMOTION) TO THE HIGHER COMMANDS.—All assignments to command, from that of a regiment upward, are made by the sovereign. Even general staff officers of distinction seldom attain the rank of a general officer unless they have served a year or two as regimental commander (*Regiments-Kommandeur*). It rarely happens that foot artillery or engineer officers are assigned (promoted) to brigade and higher commands, the only advancement open to them being that of inspectors and inspector generals of their respective arms. The heads of foot artillery inspections are generally major generals and those of engineer inspections lieutenant-generals, while the inspector general of foot artillery and the chief of the engineer and pioneer corps each hold the rank of lieutenant-general.

One might suppose that in the lack of legal provisions and executive regulations touching promotion and retirements injustice would be done to worthy officers, and unworthy ones advanced through favoritism or nepotism. But judging from the prevalent opinion among the officers concerned this does not seem to be the case, and the existing system has the great merit of excluding incompetents from command. The question as to whether an officer is, or is not, qualified for the next higher command to which his seniority (*Dienstalter*) would entitle him, is not determined by examinations, except only to some extent in the cases of foot artillery and engineer officers, but by his official and private record. This is embodied in annual confidential reports submitted by the regimental commander to his superiors, and the company officers' theoretical knowledge and proficiency in military subjects is also judged by an essay which they have to hand in once a year. The whole subject of promotion is justly regarded as of paramount importance, and is carefully watched over by the sovereign, without whose intervention no officer can enter or leave the army, or be promoted therein, and before whom a full and impartial statement of the facts in each case is laid by the military cabinet.

The ordnance store officers (*Zeug Offiziere*) and artificer officers (*Feuerwerk Offiziere*) hereinafter referred to under the head of General Inspection of Foot Artillery, form a special corps, to whom the foregoing remarks respecting promotion do not apply.

THE COMPANY.—The chief of a company (squadron, battery) is a captain. He trains his company independently, exercises primarily the disciplinary power, looks after the supplying of vacancies in the noncommissioned grades and is responsible for the clothing and equipment in use. The subalterns (first and second lieutenants) are his assistants.

THE BATTALION.—The battalion is commanded, trained, and drilled according to the instructions of the regimental commander by a major, who supervises also the training and discipline in the companies and sees that the necessary supplies are kept on hand and cared for.

THE REGIMENT.—The regiment is commanded by a colonel (sometimes by a lieutenant-colonel or a major), styled regimental commander, who sees that the training of the several parts is uniform and in accordance with his general instructions; he exercises the disciplinary and also the minor judicatory power within the regiment; distributes the recruits among the battalions, and regulates all matters pertaining to discharges. He is responsible for the equipage and clothing of the regiment, its preservation, and its prompt replacement when worn out. As educator, leader, and representative of the corps of officers, he looks after

the filling of vacancies therein, reports upon the qualifications of the members, and conduct-affairs falling within the sphere of the court of honor. He promotes noncommissioned officers and may transfer, within the regiment, company officers as well as noncommissioned officers and soldiers.

THE BRIGADE.—The brigade is commanded by a major-general or colonel, styled brigade commander. He supervises the interior service and the training of the regiments and musters them. Commanders of infantry brigades are, as a rule, charged also with duties connected with the enrollment of recruits within the brigade district.

The brigade district is divided into landwehr districts, which are again subdivided into enrollment districts. In all there are 278 landwehr districts (210 in Prussia, 19 in Saxony 17 in Würtemberg, and 32 in Bavaria), each of which is commanded by a temporarily retired (*zur Disposition gestellten*) field officer, who, with the assistance of a staff consisting of a detailed lieutenant (adjutant) and of several noncommissioned officers and privates, conducts the enrollment and pension affairs, exercises the control over the persons of the "furloughed state," and takes the necessary measures for insuring the prompt mobilization, when ordered, of the forces within his district. Landwehr district headquarters are continued during war.

Brigades are numbered according to the division and corps to which they are attached; thus, the infantry brigades of the 1st corps are numbered from 1 to 4. Those of the 2d corps from 5 to 8, etc. The brigades of the guard corps and of the two Bavarian corps have each a separate series. In all there are 82 brigades of infantry, 52 brigades of cavalry, and 20 brigades of field artillery.

THE DIVISION.—All infantry divisions, except three, consist each of 2 brigades of infantry and a brigade of cavalry. Of the exceptionally organized divisions, two belong to the guard corps and consist each of only 2 infantry brigades; the third, which is attached to the 1st corps, is made up of 2 infantry and 2 cavalry brigades. There is but one division of cavalry, which belongs to the guard corps and contains 4 brigades. Each division is commanded by a lieutenant-general, whose staff consists of 1 general staff officer, 1 adjutant, 1 intendant, 1 physician, 2 auditeurs (judge-advocates) and 2 or more chaplains. The division commander directs exercises, especially field exercises, which are participated in by all or the bulk of his troops, supervises the service in his brigades and exclusively exercises the power of judicature over officers of his command. Divisions are numbered according to the corps to which they belong. Thus the divisions of the 1st corps are numbered 1 and 2, respectively. Those of the 2d corps, 3 and 4, and so forth. This principle is, however, departed from in the cases of the 25th (Hessian) and the 32d (Saxon) divisions, which are attached to the 11th and 12th (Saxon) corps, respectively. The divisions of the guard corps as well as of the Bavarian corps are numbered according to a separate series. Including the divisions of the 12th (Saxon), the 13th (Würtemberg) and the 1st and 2d Bavarian army corps, the German peace establishment embraces 44 divisional commands.

THE ARMY CORPS.—These divisions are formed into 20 army corps, of which the guard corps and the corps numbered 1 to 11 and 14 to 17 are under Prussian administration. The 12th and 13th are, respectively, under the administration of Saxony and Würtemberg and the 1st and 2d Bavarian corps under that of Bavaria. Each army corps consists, as a rule, of 2 infantry divisions (each of which contains, for the most part, besides 2 infantry brigades, a brigade of cavalry), 1 field artillery brigade of 2 regiments, a foot artillery regiment, 1 battalion each of rifles, pioneers, and train. The composition and arrangement of an army corps on a peace footing is illustrated by the following table:

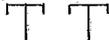
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<i>2 Division.</i>			<i>1 Division.</i>		
<i>4 Infantry Brigade.</i>	<i>3 Infantry Brigade.</i>		<i>2 Infantry Brigade.</i>		<i>1 Infantry Brigade.</i>
<i>Infantry Regiment, No. 7.</i> □ □ □	<i>Infantry Regiment, No. 5.</i> □ □ □		<i>Infantry Regiment, No. 3.</i> □ □ □		<i>Infantry Regiment, No. 1.</i> □ □ □
<i>Infantry Regiment, No. 8.</i> □ □ □	<i>Infantry Regiment, No. 6.</i> □ □ □		<i>Infantry Regiment, No. 4.</i> □ □ □		<i>Infantry Regiment, No. 2.</i> □ □ □
<i>District Hdqrs. O</i> " " P " " Q	<i>District Hdqrs. K</i> " " L " " M " " N		<i>District Hdqrs. F</i> " " G " " H " " I " " J		<i>District Hdqrs. A</i> " " B " " C " " D " " E
<i>2 Cavalry Brigade.</i>			<i>1 Cavalry Brigade.</i>		
<i>Ulan Regiment, No. 2.</i> □ □ □ □ □ <i>Hussar Regiment, No. 2.</i> □ □ □ □ □			<i>Dragoon Regiment, No. 1.</i> □ □ □ □ □ <i>Ulan Regiment, No. 1.</i> □ □ □ □ □		

1. Field Artillery Brigade.

Field Artillery Regiment, No. 1.

Division of Horse Batteries.



3 Division.



2 Division.



1 Division.

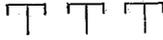


Field Artillery Regiment, No. 2.

3 Division.



2 Division.



1 Division.



Train Battalion, No. 1.



Foot Artillery Regiment, No. 1.



Chasseur Battalion, No. 1.



Pioneer Battalion, No. 1.



The principal exceptions to the normal composition of the army corps are these:

The guard corps (stationed in Berlin and Potsdam) contains also a division of cavalry and a railway brigade; the 11th and 12th and the 2d Bavarian corps are each composed of three infantry divisions; the guard corps, the 2d, 4th, 8th, 10th, 13th, 15th, 16th, and the 2d Bavarian corps are without rifles; the 12th has three and the 14th two battalions of rifles; the 7th and the 16th corps have each an extra battalion of foot artillery, and the 9th and the 11th have each but one such battalion; an extra regiment of field artillery is attached to each of the 11th, 12th, and the two Bavarian army corps.

THE INFANTRY INSTRUCTION BATTALION.—Attached to the guard corps is the infantry instruction battalion at Potsdam, consisting, during the period from April to September, of officers, noncommissioned officers, and men detailed from the infantry regiments belonging to the 1st and 17th army corps, inclusive; only a skeleton composed of the staff and one company remains in winter. The battalion is maintained with the view of introducing uniformity in training throughout the infantry arm.

The present commanders of army corps occupy grades as follows: One is a field marshal, 9 are generals of infantry, 6 are generals of cavalry, 1 is general of artillery, 3 are lieutenant-generals. The commanding general of an army corps receives, whether a general or a lieutenant-general, an annual salary of about \$7,200; a furnished residence and fuel for heating the same is also supplied him, as well as forage for eight horses. He is designated in all official communications as "the commanding general," the officers commanding brigades and divisions being styled brigade and division commanders.

Each army corps (except the guard corps, which is made up of picked men who come from all parts of Prussia and Alsace-Lorraine,) is recruited from a certain district known as an army corps district, in which the troops composing the corps are also, as a rule, garrisoned during peace. The commanding general commands the troops of his corps and the fortresses situated in his district, and in urgent cases he may also assume command of troops within the latter who do not belong to his own corps. He is responsible for the tactical training and effectiveness, and on suitable occasions personally directs the more extensive exercises of the infantry, cavalry, and field artillery of the corps. He also examines into the condition and directs the participation in the fall maneuvers of the troops of *those* arms (foot artillery, pioneers, train, etc.,) whose training is supervised by central authorities to be presently mentioned. He has the judicature over officers and men not amenable to the division courts. He takes the necessary military measures for maintaining tranquility and order within the sphere of his command, and supervises the movements of his troops for purposes of instruction and changes of station in accordance with the Emperor's directions. He has the supervision over recruiting and enrollment affairs, the immediate conduct of which is entrusted to the commanders of landwehr districts and infantry brigades, and confers with the chief administrative officer of the province touching ersatz, mobilization, and other affairs in which both are concerned. As regards purely military matters, he is not subordinated to the minister of war, but reports directly to the Emperor.

Attached to the corps staff are three general-staff officers—one chief of the general staff (a colonel or lieutenant-colonel) and two others of the grade of major and captain, respectively; two (sometimes three) adjutants (majors); the military intendant; an auditeur, physician general, chief chaplain, and corps veterinarian.

The headquarters of the German army corps are located at the following points, which are, as a rule, the most important towns in the several corps districts:

Guard corps, Berlin; 1st corps, Königsberg; 2d corps, Stettin; 3d corps, Berlin; 4th corps, Magdeburg; 5th corps, Posen; 6th corps, Breslau; 7th corps, Münster; 8th corps, Coblenz; 9th corps, Altona; 10th corps, Hanover; 11th corps, Cassel; 12th corps (Saxon), Dresden;

13th corps (Württemberg), Stuttgart; 14th corps, Karlsruhe; 15th corps, Strasburg; 16th corps, Metz, Lorraine; 17th corps, Dantzic; 1st Bavarian corps, Munich; 2d Bavarian corps, Wurzburg.

CONDITIONS OF ADMISSION TO THE CORPS OF OFFICERS.—During peace the German corps of officers is recruited from two classes of persons, namely: (1) From the corps of cadets who join the army as second lieutenants, or as warranted (*wirkliche*), or titular (*characterisirte*) sword-knot ensigns (*Portpfeefähnliche*); and (2), from young men of education and good social position who join regiments or independent battalions as so-called officer aspirants or *Avantageurs*.

To begin with *avantageurs*. The question of the acceptance of an *avantageur* is decided after a careful inquiry into his antecedents by the regimental or independent battalion commander, whom, it may be mentioned in passing, the sovereign holds responsible for the efficiency and deportment of his officers, and whose recommendations for the elimination of unworthy ones carry with them great weight.

The *avantageur*, who performs the duties, receives the pay, and wears the uniform of a private soldier, is usually required to live in barracks for the first few weeks of his service, after which he is permitted to room outside and take his meals at the officers' mess.

Appointment to the grade of sword-knot ensign—an act of the sovereign—is, in the main, conditioned upon (1) scientific qualification, which must be demonstrated to the satisfaction of the examining board known as the "superior military examination committee," or by the production of a diploma (*Arbiturientenzeugnis*) from a German gymnasium or Real school of the first class; and (2), a certificate issued after at least five months' uninterrupted service of the candidate, and signed by his company, battalion, and regimental commanders, setting forth that, judging from his physical, mental, and moral qualities, his deportment, zeal, and the degree of practical knowledge of the service he has acquired, they deem him worthy to continue in service with the view to advancement.

The examination of candidates for the position of ensign, who are not in possession of the college diploma, embraces the following subjects:

(1) *The German language*.—A good legible handwriting, a clear style, free from grammatical and orthographic errors; facility of expression, both in writing and conversation; a general knowledge of the development of German literature, and familiarity with at least one of the prominent German authors are required.

(2) *Latin*.—The candidate is examined as to his ability to read without the aid of a dictionary such authors as Cæsar and Livy, and to make written translation from Latin into German; he is also required to analyze Latin sentences.

(3) *French*.—Readiness must be shown in translating from German into French and *vice versa*, as well as in the analyzation of sentences; also a knowledge of the syntax.

(4) *Mathematics*.—Arithmetic; algebra up to equations of the second degree; use of logarithms; plane geometry and trigonometry.

(5) *Geography*.—Physical and political.

(6) *History*.

(7) *Drawing*.

(8) The applicant may also be examined in other branches in which his college testimonials show that he has received instruction.

The age limits within which persons may be appointed ensigns are 17½ and 23 years.

Ensigns, warranted as such (for a period, as a rule, of not less than six months), and not more than 25 years old, who are in attendance upon and in good standing at a war school, and in the judgment of the faculty prepared for the officer examination, are reported to the "superior military examination committee" with a view to undergoing such examination before said committee. The examination embraces only the military subjects that are taught at the war schools. (See page 36.)

The above conditions are not always fully insisted upon in the cases of candidates who are graduates of one of the gymnasia or Real schools of the first class, and who have been in attendance for at least a year upon a university, technical high school, or forestry academy.* Young men of this class, though required to undergo the prescribed practical test, the result of which is described in the certificate of their superior officers, may upon the recommendation of the latter be admitted to the "officer examination" before the superior military examining committee, without previous attendance of the war school and without serving the full term of six months.

The organization of the cadet corps has been already outlined. Its members are largely the sons of army and navy officers and receive their subsistence, clothing, and tuition free of, or at a nominal, charge. After passing through one of the six "cadet houses" cadets enter the central cadet institute at Gross-Lichterfelde, in the vicinity of Berlin, of which a colonel is the superintendent, where they are formed into companies and battalions for military drill and discipline.

The battalion organization has no connection with the classes, of which there are three, namely, the *secunda*, *prima*, and *selecta*. Each of the two first named is again divided into a lower and upper section, known respectively as lower and upper *secunda*, lower and upper *prima*. Those of the cadets who complete their 17th year before April 1 of the current year, have an adequate bodily development, and who after passing through the upper *secunda* are deemed sufficiently prepared, are examined (in February or March) before the "superior military examining committee." With the exception of some of the most proficient and promising, who are entered in the *selecta* class, all who have passed the examination join regiments as titular sword-knot ensigns, thus being placed on substantially the same footing with the college (gymnasia or Real school) graduates of the officer aspirants. The cadets, who having passed through the upper *secunda*, fail at the examination, as well as those who, though of sufficient age and physique are not admitted to it, are, as a rule, returned to their parents or entered in the army as privates, exceptionally so as noncommissioned officers, for the discharge of their liability to military service.

To the lower *prima* are transferred cadets of deficient age or physique who have passed successfully through the upper *secunda*, and also talented cadets of the same class standing who are not so deficient but whose parents desire the transfer. In exceptional cases the latter class of cadets may also be appointed sword-knot noncommissioned officers, and the former noncommissioned officers, all being at the same time members of lower *prima*. After successful passage through the lower *prima* cadets, are either admitted to the "ensign examination" or transferred to the upper *prima*, according to the expressed desire of their parents. If in the former case they pass the examination, as they almost invariably do, it depends upon circumstances whether they are sent to their regiments as titular or actual sword-knot ensigns. The course through upper *prima*, during which the members may hold the appointment of sword-knot noncommissioned officers, is terminated by what is termed the *Arbiturienten Examen*.† The cadets who pass the examination are transferred to the army as actual ensigns and simultaneously sent to the war school. If, after going through the latter, they pass the officer examination with credit, they are commissioned second lieutenants as of the date of their transfer to the army.

*The gymnasia and Real schools, as well as the universities and the technical high schools referred to, are Government institutions. The respective curricula are the same throughout the country so that, for instance, a pupil who has passed through the *secunda* or second class of the gymnasium in one place would be ripe for and could enter the *prima* or first class of a like institution in another.

†This is also called the *Maturitäts Examen*, as the diploma issued to the person who has passed it declares that he is ripe or mature for the commencement of professional studies at the university.

The members of the selecta are at the close of the course subjected, if deemed proficient, to the officer examination; those who pass, and who seem qualified by reason of their conduct and bearing while on and off duty, receive the appointment as second lieutenant. Such selecta cadets as have passed the examination, but whose deportment has not been altogether satisfactory join regiments as ensigns, a period of not less than two months nor more than six months intervening before their advancement to the grade of second lieutenant. Those cadets who fail upon examination, or who by reason of deficient deportment or insufficient preparation are not admitted thereto, are appointed ensigns and join regiments, the former for reexamination at the end of three months. The latter may, without previous attendance of the war school, be reported by their commanding officer to the "superior military examining committee" as prepared for the "officer examination" when they have acquired the prescribed certificate of good conduct and good soldiership.

Upon passing the officer examination, and having been approved by the corps of officers, ensigns may be recommended for appointment as second lieutenants.

Ensigns who, after attendance upon the war school, fail at the officer examination may be admitted to a second and final examination under certain regulations which it is not necessary to specify here.

The nomination to the sovereign of a person who has passed the "officer examination" for appointment as second lieutenant must be accompanied—unless he has passed through the selecta of the principal or central cadet institute—by a statement of the officers of his regiment or independent battalion that they regard the nominee as fit to become their comrade, and that he possesses the practical knowledge of the service which is indispensable to an officer. If a majority of the officers refuse to join in such a statement the next senior ensign is at once voted upon; but if the election of the candidate be opposed by a minority only, the reasons of the latter for their dissenting view are submitted to the commanding general who decides what weight, if any, is to be attached to it. Inasmuch as ensigns generally dine at the officers' mess and are otherwise brought into frequent contact, socially and officially, with the officers, the latter are in a position to form a pretty correct estimate of their mental and moral qualities.

Ensigns of artillery and pioneers (engineers) who have passed the officer examination are first appointed provisional or extra second lieutenants in the army and are not commissioned second lieutenants in their own arm until, having attended the artillery and engineer school at Berlin, they have been found proficient by an examining board consisting of artillery and engineer officers.

The policy of opening up the higher military career to all young men of respectable parentage who can demonstrate their fitness for it, has undoubtedly been attended with good results. Indeed, it may be said to be a necessary one in an army numbering upward of 20,000 officers, of whom none can retain his command, especially if it be a high one, after his inability to exercise it efficiently has become apparent to his superiors. The proportion of persons who are commissioned from civil life to those appointed to the army from the corps of cadets is about 3 to 1, and officers of experience declare that each class is benefited by its association with the other.

OFFICERS OF THE RESERVE AND LANDWEHR.—Officers of the "furloughed state" (reserve and landwehr) are appointed from the following classes:

(1) Men, who on quitting active service or subsequently have received a certificate setting forth that they are qualified for the position of an officer (officer aspirants). Prerequisites to an appointment to such a position are—

(a) Participation in two courses of practical exercises of eight weeks' duration each, as a rule during the two years next following their discharge from active service. The officer

aspirant performs noncommissioned officers' duties during the first of these periods, and in case of his successful passage of the theoretical and practical examination to which he is subjected at its close, is made vice first sergeant. Throughout the second period he performs the duty of an officer, in order that he may obtain the assent of the commander of the regiment to his appointment as reserve officer therein, or as landwehr officer.

(b) Election—in peace time by the corps of officers of the landwehr district; in war, by the corps of officers of the organization to which the aspirant is attached.

(2) By transfer of officers from the active list, and by men who have distinguished themselves before the enemy. Even in the latter case election is a *sine qua non*.

Officers of the "furloughed state" may be required, if *reserve officers*, to attend on three separate occasions exercises lasting from four to eight weeks each. As a matter of principle they are attached, in the event of mobilization, to the organization to whose reserve they belong. A reserve officer advances to a higher grade *pari passu* with the regimental officer of the line next below him.

Officers of the "furloughed state" may be required as landwehr officers to attend the exercises specially ordered for the landwehr, or they may, if they wish, be ordered to attend the exercises of the line troops. In case of mobilization they may be attached either to the troops of the landwehr or line.

THE TRAINING OF THE ARMY.—The training of the troops, both in small and large bodies, is carried on with ceaseless energy and zeal throughout the year according to certain well-defined principles and established rules. The instruction is methodical and progressive, and not until the smaller organizations are fully up to the mark are they united and exercises on a larger scale begun.

Each officer is responsible for the instruction of his own command, and in the employment of the methods to bring it to a state of efficiency is allowed the greatest possible latitude. Although the exercises are frequently witnessed by the superior officers, they rarely interfere or find fault.

The winter season is set apart for the instruction of recruits who have joined in the autumn and every facility in the way of drill halls and barrack yards is provided for that purpose.

In the infantry an officer and as many noncommissioned officers and vice corporals as can be spared are specially selected and excused from every other duty to conduct this instruction, which is largely individual, especially in the beginning, and both theoretical and practical. Much attention is given to the setting-up drills, which are not confined to the execution of particular motions prescribed in the drill regulations, but include running, jumping, gymnastics, the scaling of walls, etc. The rifle is not given to the recruit until the fourth week, and great pains are taken in teaching him the principles of aiming and to pull the trigger without deranging the aim. The company drills take place in March and April and include route marches. Great importance is attached to dispersed order drills, both on broken and level ground. In May the captain presents his company for inspection as to its proficiency to the battalion commander. The battalion is drilled three or four days a week in the forenoon during this month; the company drills continue during the other days. The afternoons are devoted to gymnastic exercises, aiming drill, swimming, etc.

The system of training for the other arms is based on similar principles, though, of course, modified to suit the conditions of each.

Upon the conclusion of the exercises of various organizations of one arm (*i. e.*, up to and inclusive of brigades), troops of the three arms are assembled for field exercises by the division commander, who either pits parts of his command against each other or lets the whole of it operate against a marked enemy, the latter serving only as an object of attack.

The corps maneuvers, which are, as a rule, especially ordered by the Emperor, are designed to demonstrate the handling of large bodies of troops by the leaders and the skill of the commanders of the three arms to support one another effectively.

The so-called "Kaiser maneuvers," participated in by two or three corps and conducted by the Emperor in person, constitute the crowning act of the year's work. Here the military problems are set the commanding generals by the Chief of the General Staff of the Army. Generals are appointed as umpires and provided with staffs detailed from the Great General Staff at Berlin, and nothing is left undone to create a situation which, while excluding all unnecessary assumptions and suppositions, gives full effect to existing facts as regards strength and position of troops, and bears a close resemblance to actual war.

Maneuvers of cavalry divisions, exercises in the attack and defense of strong places, and in the bridging of streams are also prominent features of the fall maneuvers. In short, care is taken that every branch of the army, including during the last three years detachments from the foot artillery, while participating in warlike operations and having as it were presented to it an image of war, is taught its obligations and tasks within the sphere of a command, the effectiveness of which is to be demonstrated by a vigorous and hearty cooperation with one another of all the different arms that comprise it.

Having thus roughly sketched the German military establishment as raised, organized, commanded, and trained in peace, it is deemed proper, before discussing the modification it undergoes when placed on a war footing, to present an outline of the constitutional and conventional provisions which define the relations of the Emperor to the Army, both in peace and war, and in that connection to give a succinct account of the constitutional as well as the functions of the German war ministries and other authorities not directly connected with the command of troops or pertaining to the staff.

POWERS AND DUTIES OF THE COMMANDER-IN-CHIEF AND HIS RELATIONS TO THE CONTINGENTS COMPOSING THE ARMY.—As is well known the present German Empire was created at the close, and as the result, of the war with France in 1870-'71. The Federal Council (*Bundesrath*) and the Reichstag, representing respectively the sovereigns and the people of the allied German States, ratified on April 16, 1871, a compact termed the Constitution, by which the states and free towns of the North German Confederation* and the confederated South German States of Baden, Württemberg, Hesse, and Bavaria were formed into a Federal State (*Bundesstaat*) to be known as the German Empire, with the King of Prussia, under the title of German Emperor, as president or chief executive.

Section IV, article 11, of the Constitution, imposes on the Emperor the duty of representing the Empire internationally, and grants him the power to declare war and conclude peace, to enter into compacts and treaties with foreign states, and to accredit and receive envoys. Except in the case of actual or imminent invasion of German territory, the assent of the federal council is, however, a prerequisite to a declaration of war.

The Federal Council and the Reichstag constitute the legislature of the Empire, the joint enactments of which must be accepted and promulgated as law by the Emperor. The council is made up of delegates appointed by the sovereigns or senates of the federal states and free towns, to each of which is accorded one or more votes, depending upon the number of its inhabitants. Prussia has 17, Bavaria 6, Saxony and Württemberg each 4, Baden and Hesse each 3, Mecklenburg-Schwerin and Brunswick 2 each, and the remainder 1 each. In all there are 58 votes. Resolutions and bills are carried by a majority vote, but proposed amendments of the Constitution are defeated by 14 negative votes of the council, while such

*Prussia, Saxe-Weimar, Oldenburg, Brunswick, Saxe-Meiningen, Saxe-Altenburg, Saxe-Coburg-Gotha, Anhalt, Schwarzburg-Sondershausen, Schwarzburg-Rudolstadt, Waldeck, Reuss, (elder-line), Reuss (junior-line), Schaumburg-Lippe, Lippe, Lübeck, Bremen, Hamburg, Mecklenburg-Schwerin, Mecklenburg-Strelitz.

as affect the reserved rights of a member of the union can be adopted only with its own consent.

The Reichstag, consisting of 397 members, each representing, as a rule, a population of 100,000, is elected for five years and is guaranteed by the Constitution the usual rights and immunities of a legislative body. If dissolved before the expiration of five years (as it may be) a new one must be chosen within sixty and convened within ninety days. It can not be prorogued without its consent for a longer period than thirty days.

Section XI of the Constitution contains the following provisions relating to the federal military establishment:

Immediately after the promulgation of the Constitution the entire body of Prussian military legislative acts and all regulations, instructions, and decrees supplementary and explanatory thereof are to be introduced throughout the Empire, barring only such as relate to religious matters.

The German land forces shall form a homogeneous army subject in war and peace to the command of the Emperor. The regiments shall be numbered consecutively throughout the entire German Army, and as regards the ground colors (*Grund-Farben*) and cut, the uniforms shall accord with those of the Prussian troops. The chiefs of contingents (sovereigns of the states composing the union) may, however, authorize minor variations. It is the privilege and duty of the Emperor to see that throughout Germany the organizations are prepared for war (*kriegstüchtig*) and of the prescribed strength, and that uniformity is established and maintained in organization and formation, in armament and the exercise of command, in the training of the men and the qualifications of the officers. To this end he is authorized to satisfy himself at any time by inspection of the constitution of the several contingents that they contain nothing in conflict with these provisions and to direct the correction of defects discovered therein. He determines the strength present (*Präsenz-Stärke*), the arrangement of the contingents into divisions, corps, etc., the organization of the landwehr, and has the right of determining the location and strength of the garrisons within the German federal territory and of directing that any and every part of the German Army shall be placed on a war footing. In case the public safety be threatened in any part of the federal territory the Emperor may declare martial law in every part of it.

With the view to maintaining indispensable uniformity in administration, supply, armament, and equipment of all parts of the German Army, all instructions relating to these subjects that may hereafter be issued for the guidance of the Prussian army will be communicated to the commanders of the other contingents by the committee on the land forces and fortresses provided for in article 8.

All German troops are bound to obey the commands of the Emperor and on joining the colors to acknowledge this obligation in their oath (*Fahneneid*). The commanding officers of the contingents, as well as all officers who command troops composed of more than one contingent, also commandants of fortresses, shall be appointed by the Emperor. All officers whom he may appoint owe him allegiance, and shall so declare in their oath. The appointment and assignment of generals and the assignment of officers to the position or command of a general officer, within a particular contingent, is to be conditioned upon the Emperor's approval in each case. He has the right to select officers from any contingent of the German Army for military positions which he is empowered to fill.

Subject to the foregoing limitations the sovereigns and the senates of the federal states and towns appoint the officers of their contingents, unless they have surrendered this power by special convention. As the immediate chiefs of the troops raised in their respective territories they are entitled to all the honors pertaining thereto, and have the right of inspecting such troops at any time. Promotions and appointments of officers of their respective

contingents are to be promptly notified to them with the view to the publication of the same under their direction. They further have the right to use as a police force not only the troops of their own contingents, but also those of other organizations serving within the limits of their respective territories.

The above provisions, coupled with the further one, to the effect that all federal expenses for military and other purposes that may be authorized by law are to be defrayed, as far as practicable, out of funds remaining on hand from the previous year and accruing from customs, revenue tax, and the postal and telegraph services, and that any required amount not supplied from these sources shall be raised by contributions from the several states according to the population of each would seem to be well calculated, if unaccompanied by reservations or provisos, to bring about the homogeneity aimed at. Their force and efficacy are, however, somewhat impaired by the concluding provision (*Schlussbestimmung*) of Section XI, which excepts Bavaria and Württemberg from the operation of them so far as they vary from the terms of the compact and of the military convention, respectively, entered into with these states on November 23, 1870, and on November 21-5, 1870. For a full understanding of the military relations subsisting between the imperial or federal government of Germany and the governments of the states mentioned we are obliged, therefore, to refer to the said instruments. On the other hand the contingents of several of the German states have been, by special agreement, either wholly merged into the Prussian army or more closely connected with it than the terms of the above quoted constitutional provisions prescribe. A brief review of the extent to which the King of Prussia as German Emperor controls the contingents of the several states which, together with Prussia, constitute the German Army, may not, therefore, be out of place.

Bavaria provides for the maintenance of its own military establishment, including that of the fortifications within its territory, but is bound to expend for its contingent, the strength of which is determined by federal law, an amount equal to that appropriated per head for the other parts of the German Army. It receives its share of the customs, etc., and in the expenditure of funds accruing to it for military purposes is governed as nearly as practicable by the principles on which the federal appropriation act allots the entire amount appropriated for the remainder of the German Army to certain specific purposes.

The Bavarian army, consisting of two army corps, constitutes a distinct and separate constituent part of the German Federal Army, with independent administration under the command of the King of Bavaria. Accordingly the Bavarian troops now forming part of the German forces that occupy the annexed provinces of Alsace-Lorraine are subject to the commanding general only so far as concerns the military security of the sphere of his command and the maintenance of public order therein. The Bavarian regiments are numbered according to a separate series. The procedure of military courts is regulated by Bavarian law. In war, beginning with the mobilization, which is ordered by the Emperor through the King, the contingent owes absolute obedience to the commander-in-chief of the Empire, and this obligation is acknowledged in the oath the recruits take on joining the colors. In peace and war the organization, formations, training, and pay and allowances of the Bavarian contingent must correspond with the remainder of the federal army, and as to the existence of such correspondence and upon the question as to whether it is of the prescribed strength and in a state of preparedness for war the Emperor may satisfy himself by inspection.

Absolute uniformity with other German troops as regards armament, equipment, insignia of rank, and clothing has not been stipulated for. The cut of the uniforms, and especially the head covering have, however, been changed to accord with the Prussian pattern; but the color of the former remains sky-blue, a fact which is regretted by some military men, as in war the enemy may discover what particular troops confront him and thus be enabled to sow the seeds of discord among the troops of the different contingents.

The erection of new fortifications on Bavarian soil for the defense of entire Germany, while conceded to the federal government as a right, is to be determined upon by special agreement. Toward the cost of the construction and equipment of such fortifications and of others that may have to be erected elsewhere for the same purpose Bavaria contributes in proportion to her population.

The other German States have regulated the relations of their contingents to that of Prussia by special conventions.

Though the Saxon and Würtemberg contingents form each an independent army corps under the administration of their respective governments, and separate estimates are prepared for their support, which must, however, be submitted to the Reichstag, they are more closely connected with the Prussian army than the Bavarian corps. It is true that both Saxony and Würtemberg, like Bavaria, have their own war ministries to which the Prussian war minister transmit for execution imperial instructions and regulations (the provisions in regard to the transmissions through a committee of the federal council having fallen into disuse); nevertheless the distinction between their troops and those under Prussian administration are on the whole unessential. The uniform is of the same color and in other respects differs but slightly from that of Prussia. The Saxon and Würtemberg corps (12th and 13th) participate in such Prussian institutions as the General Staff, War Academy, and other military educational establishments, and uniformity in training is promoted by the attachment of Saxon and Würtemberg officers to Prussian, and of Prussian officers to Saxon and Würtemberg regiments. The oath of office taken by officers of the Saxon and Würtemberg contingents embraces, besides the obligation of loyalty to their respective sovereigns—who commission them—that of obedience to the federal commander-in-chief. The King of Würtemberg appoints the commanding general of his army corps subject to the approval of the Emperor, and the latter appoints the commanding general of the Saxon corps upon the recommendation of the King of Saxony.

The troops of Mecklenburg-Schwerin and Mecklenburg-Strelitz are incorporated in Prussian divisions and corps; and those of the Grand Duchy of Hesse constitute a distinct division which is numbered 25 and belongs to the 11th corps. As regards military judicature, disciplinary rules, uniform, equipment, and insignia of rank, the provisions of the constitution apply to all three of these contingents, and they are also completely under Prussian administration and command. The officers are appointed by the Emperor and take the oath of loyalty to him, as do also the officers of all German contingents other than those of Bavaria, Saxony, and Würtemberg.

Though the Baden contingent, which forms the bulk of the 14th army corps, remains a distinct body, the King of Prussia has become its chief (*Kontingentsherr*) and administers its affairs. The officers, appointed by the Emperor, are designated "Royal Prussian." Except that the Badish colors appear in the sword-knots and sashes, and that the helmet ornament exhibits the Grand Duchy's coat of arms, the entire contingent is uniformed and equipped after the Prussian model.

Nearly the same conditions exist in the Duchy of Anhalt and the states of Thuringia, except Schwarzburg-Sondershausen, the principal difference being that the infantry battalions and regiments composed of their subjects are assigned to Prussian brigades and divisions and they furnish their proportion of recruits to the special arms of the Prussian contingent.

The troops of Oldenburg, though still forming separate organizations, have been entirely absorbed by Prussia since 1867, and since the year 1886 the troops of the Duchy of Brunswick have ceased to constitute a separate contingent. The regent of Brunswick exercises over these troops the powers of a commanding general (corps commander), including the disciplinary punishment power.

The troops raised in the remaining federal states and free towns are no longer formed into separate organizations, but enter Prussian regiments, which are, however, assigned to permanent stations within the territories of the states and towns mentioned.

From the above résumé of the relations between the nominal commander-in-chief of the federal army and the various contingents composing it, it is manifest that its unity is by no means as complete as thorough preparedness for war would seem to make desirable. Bavaria especially occupies a position in the Union which during peace makes its two army corps well nigh independent of imperial control, and even the Saxon and Würtemberg contingents are not in some important respects subject to it. All three of the states maintain, as has been pointed out, their own war ministries which, no less than the Prussian ministry of war, are represented on the floor of the Reichstag when military affairs are under discussion, and neither of them shows any disposition to surrender its reserved rights in the interest of German military solidarity. The only peace power which the German Emperor clearly possesses as to *all* German troops is that of inspection, and even this is restricted in the case of Bavaria by the constitutional provision that a proposed exercise of it must be notified to the Bavarian King beforehand.

It is admitted, however, on all hands that the constitution leaves no doubt as to the Emperor's supremacy once war is declared or decided upon. His power over every German soldier, that is to say, over a large proportion of the German adult male population, is then unlimited. It must also be borne in mind that even in peace he is the chief of the Prussian contingent, as well as of the troops of the minor states that have been consolidated with it, comprising 77 per cent of the German land forces; and that the German Navy is distinctively a federal and not a state institution. Moreover, although the three South German sovereigns are not military subordinates of the Emperor, who is merely the president of the confederation, they appear to act in full accord with him as regards military matters, as is evidenced afresh by the fact that all the German States united last winter in urging upon the Reichstag the enactment of the military bill (*Militär-Vorlage*), largely increasing the army, which has since become law in a modified form. Indeed, with uniformity in organization, armament, and general liability to military service, and taking into account the intensely patriotic spirit of the German people irrespective of state lines, the German military system may be regarded as sufficiently compact.

NONCOMMISSIONED OFFICERS.—The importance of an efficient corps of noncommissioned officers is perhaps nowhere more keenly felt than in Germany. Only a comparatively small number is obtained from the noncommissioned officers' schools, and indeed it is sometimes found that the élèves of these institutions, while almost always well equipped theoretically, sometimes lack the most essential of all requirements—moral stamina and aptitude for handling men. The bulk of noncommissioned officers is therefore taken from the ranks, the real choice devolving, as with us, upon company commanders, who realize that their own professional standing depends in a great measure upon the successful exercise of their discretion. Noncommissioned officers are warranted by regimental commanders upon the recommendation of chiefs of companies. The complement of noncommissioned officers embraces for each company, besides a first sergeant (*Feldwebel*,—*Wachmeister* in the cavalry) and a vice first sergeant, styled sword-knot noncommissioned officers, 4 sergeants and 8 corporals (*Unteroffiziere*), exclusive of vice corporals (*Gefreite*). Up to the grade of first sergeant, noncommissioned officers are promoted according to seniority in each company. The first sergeant, who is a most important functionary and who is called the "mother," as the captain is known as the "father," of the company, is selected by the colonel from the noncommissioned officers of the regiment. As a rule noncommissioned officers are appointed from suitable men who have reenlisted (*Kapitulanten*) with a view to their advancement. They

are taught reading, writing, arithmetic, geography, and history, unless they possess already a sufficient knowledge of these branches, as well as military subjects, and for this purpose are formed into classes of from 20 to 25, the instructors being civilians, noncommissioned officers, and officers. Further instruction, intended to fit them not only for the higher noncommissioned grades but for positions in the civil service to which they may be appointed on quitting the army, is given noncommissioned officers after five or six years' service. The attendance is voluntary. The subjects taught are German, history, arithmetic, mensuration, geography, map reading and military correspondence. A certificate of proficiency is awarded to every noncommissioned officer who has successfully taken this course or has passed an examination in the subjects embraced therein.

After twelve years' service in the active army, noncommissioned officers receive a premium of about \$285 and acquire, moreover, the right to a permanent position in the civil service for which they may be qualified. While with the colors, suitable provision is made for their comfort, and in some instances for that of their families; they have separate messes, are entitled, both in and out of barracks, to a salute from their inferiors; in short the Government endeavors by every means to affix the stamp of respectability upon them as a class. Sword-knot noncommissioned officers are quartered in separate furnished rooms, or if permitted to live out of barracks, are given commutation therefor. Sword-knot *ensigns* rank as noncommissioned officers and are required to salute as their superiors the first and the vice first sergeant; they form a distinct class, being in the line of promotion.

The noncommissioned grades of the reserve and landwehr are supplied from discharged noncommissioned officers who are physically qualified and are still within the reserve and landwehr maximum age limits (27 and 39 years, respectively), by vice corporals, and privates who on discharge from the active army received a certificate of their qualification for the position of noncommissioned officer; and by other suitable persons.

CHAPTER IV.

"INSPECTIONS."

"INSPECTIONS" OF SPECIAL ARMS, TECHNICAL AND EDUCATIONAL INSTITUTES, ETC.

Although in matters pertaining to discipline and tactical training the troops of all arms are subject to the orders of the commanding generals, the special arms, particularly the foot artillery and pioneers, are also subordinated as regards particular branches of duty and certain personal affairs to "inspections" as follows:

I. THE CAVALRY INSPECTIONS.—These inspections, two under Prussian and the other under Bavarian administration, each headed by a lieutenant-general, who is assisted by an adjutant, are charged with the treatment of special cavalry questions. The two Prussian inspections are located in Berlin, the other in Munich. The inspectors are designated by the Emperor as leaders of the more extensive cavalry exercises, for which purpose cavalry divisions are specially formed, and they also inspect the mounts of the several regiments on such occasions. A military riding institute, whose office it is to train officers and noncommissioned officers as instructors in riding with a view of bringing about uniformity in this respect throughout the German cavalry, and which receives pupils from all the states of the Empire, is maintained at Hanover.

Equitation schools also exist in Bavaria and Saxony. Prussian, Bavarian, and Würtemberg cavalry are supplied with horses which (originally purchased in open market at the age of three years, by itinerant boards of cavalry officers and veterinarians) are distributed among fourteen remount depots with the view to their development, whence at the end of a year all, except such as have been found to be unfit for the cavalry, go to a regiment. After being thoroughly broken they are assigned for full duty to a squadron, being then about 6 years old.

II. THE INSPECTION OF FIELD ARTILLERY (Berlin), whose chief, a lieutenant-general, assisted by two adjutants (captains), exercises control over the field artillery as regards its material and special training in gunnery. Formerly there was a "general inspection" of field artillery which had a general oversight as well of the personnel as of the training of the field artillery troops. But the idea that field artillery is a special arm, requiring the supervision of experts for its training, has been abandoned, the general inspection and also the practice of sending field artillery lieutenants to the artillery and engineer school have been discontinued and this arm is now for all purposes, with the exception above noted, subordinated to the division and corps commanders. The field artillery firing school at Jüterbogk, about 20 miles distant from the capital, which trains officers from all field artillery regiments as instructors in gunnery, consists of three instruction batteries as a cadre and of a staff of commissioned and noncommissioned instructors, who are detailed for a term of years. The course at the school lasts five months.

III. THE GENERAL INSPECTION OF FOOT ARTILLERY (Berlin), presided over by an inspector general, a general of artillery, whose staff consists of a chief (colonel) and three adjutants (majors), has a supervisory power over the Prussian foot artillery, from two to three regiments of which are grouped under each of four foot artillery inspections, headed severally by a major-general. The latter inspections have also each an artillery depot inspection

subordinated to them, whose business it is to see that the armaments of fortifications are kept in readiness for defense. The school of gunnery for foot artillery at Jüterbogk, instituted for the training of officers and noncommissioned officers of all foot artillery regiments as instructors in gunnery, consists of two instruction companies and a staff of commissioned and noncommissioned instructors, who are detailed for a limited period.

Subordinated to the general inspection of foot artillery is also the "Chief Artificer School" (*Oberfeuerwerker-Schule*) in Berlin, which trains intelligent artillery noncommissioned officers in laboratory work, and prepares them for examination with the view to their appointment as artificers (*Oberfeuerwerker*) and employment in connection with the manufacture and storage of ammunition, etc.

The corps of artificer officers, comprising in all 120 captains, first lieutenants and second lieutenants, are recruited from these sergeants, and during peace are in charge of laboratories at artillery depots or employed in connection with the artillery manufacturing establishments. In war they are assigned to duty with siege parks. The corps is closely related to, but separately organized from, the ordnance store corps.

IV. ARTILLERY DEPOTS.—There are 39 Prussian, 5 Bavarian, 1 Saxon, and 1 Würtemberg—in all 46—"artillery depots," in which is stored the fortress artillery material and such part of the field artillery material as is not in possession of the batteries, and ammunition of every description. The depots are under the immediate charge of captains of foot artillery, who are assisted by artificer and ordnance store corps officers and noncommissioned officers and by large fatigue parties drawn during the period of recruit drills (October to March) from the older soldiers of the neighboring regiments. The Prussian depots are grouped under four artillery depot inspections, headed by colonels of foot artillery, who are assisted by artificer officers and ordnance store corps officers, each inspection comprising the territories of from two to four army corps.

V. ARTILLERY MANUFACTURING ESTABLISHMENTS.—The artillery manufacturing establishments consist of (1) six artillery workshops, located at Spandau, Deutz, Dantzic, Strasburg, Dresden (Saxony), and Munich (Bavaria), where gun carriages and other carriages are made and repaired; (2) of two laboratories (*Feuerwerks-Laboratorien*), one at Spandau and the other at Ingolstadt (Bavaria); (3) of two gun foundries (*Geschütz-Giessereien*), one at Spandau and the other at Ingolstadt; (4) of two projectile factories (*Geschoss-Fabriken*), one at Siegburg and the other at Ingolstadt; and (5) of four powder factories or mills (*Pulver-Fabriken*), one at Spandau one at Hanau, one at Gnaschwitz (Saxony), and one at Ingolstadt. They are under the immediate charge of officers of foot artillery, assisted by officers of the ordnance store corps and artificer officers. The superintendent of each establishment is styled the director; a subdirector, and in some cases an assistant director, are the officers next in authority and upon whom the charge devolves in case of the director's inability to act. With a view of enabling them to acquire an insight into the practical working of these institutes a certain number of foot artillery officers are attached to them for instruction during the fall and winter months of each year. These manufacturing establishments, which report to the Arms Department (*Waffen Departement*) of the War Ministry, supply only a comparatively small proportion of the guns, gun carriages, projectiles, armor plates and powder required for the service of the army, the bulk being obtained under contract with private firms. The mechanics, laborers, and other employés are civilians.

VI. SMALL ARMS AND CARTRIDGE FACTORIES.—There are three Prussian and one Bavarian small arms and cartridge factories (*Gewehr und Munitions-Fabriken*), each under the charge of a field officer as director, assisted by two captains as subdirectors, who respectively conduct the small arms and the cartridge factories. At these factories are further employed ten officers of the ordnance store corps; and a number of the best shots among the infantry

lieutenants, of not less than five years' service as commissioned officers, are annually detached from their regiments for instruction thereat, with a view to their appointment as inspectors of small arms on returning to their commands. These establishments are located at Spandau, Dantzic, and Erfurt (Prussia), and at Amberg (Bavaria).

The Prussian factories are subordinated to an inspection, the inspector being a colonel of infantry, who has an adjutant and an officer of the ordnance store corps assigned to him as staff. The inspection reports to the Arms Department of the War Ministry.

VII. THE CHIEF OF THE ARTILLERY PROVING COMMISSION (*Artillerie Prüfungs-Commission*), a major-general, has the immediate supervision of—

(1) The commission aforesaid, of which he is the president, and which is divided into two sections, one of which has to do with field artillery and the other with fortress, siege, coast, and marine artillery.

(2) The experimental section of said commission, consisting of an experimental company fully officered, and of the depot administration, to which a captain and lieutenant of the ordnance store corps and two artificer lieutenants are attached.

There is also a Bavarian inspection of foot artillery, headed by a major-general.

VIII. THE GENERAL INSPECTION OF THE ENGINEER AND PIONEER CORPS AND OF FORTRESSES, consisting of a lieutenant-general, styled the chief of the engineer and pioneer corps and inspector general of fortresses, with his staff of six officers (a lieutenant-colonel and five captains), exercises control over—

(1) Four engineer inspections, headed by lieutenant-generals and major-generals, and embracing, severally, two or three fortress inspections, under each of which several fortresses are grouped.

(2) Two pioneer inspections, each headed by a major-general, among which the sixteen Prussian pioneer battalions are distributed, being subordinated to them as regards their technical training.

(3) The engineer committee (Berlin), headed by a lieutenant-general, charged with the preparation and revision of fortification projects and acting as a consultative body upon special affairs relating to the engineer and pioneer system.

(4) The inspection of military telegraphy (Berlin), which is headed by a colonel and supervises the management of the military telegraph school. The school trains cavalry officers and noncommissioned officers in the telegraph service.

A comparatively small proportion of the Prussian engineer corps is attached to the pioneer battalions, the bulk being employed in connection with the construction, repair, and maintenance of fortifications. There is also a Bavarian inspection of the engineer corps and of fortresses, whose seat is at Munich. This inspection has the supervision over a military telegraph school, as well as over an aerial navigation instruction company, both of which are likewise located at Munich.

IX. THE INSPECTION OF RIFLES AND SHARPSHOOTERS (*Jäger und Schützen*) AT BERLIN.—The inspector, a major-general, who is assisted by an adjutant and a detailed officer, supervises matters pertaining to promotion and transfer of officers, to the filling up of the reserve of the rifles, to the musketry training of the battalions, and to the relation of the latter to the forestry department.

Among the minor permanent establishments, not attached to any particular inspection but reporting direct to the War Ministry, is a small arms experimental board, consisting of a field officer as president and seven officers as members, all of whom belong to the infantry arm.

X. THE GENERAL INSPECTION OF THE SYSTEM OF MILITARY EDUCATION AND TRAINING.—In Prussia the control of military training and education, disconnected from service with troops

(excepting that of the War Academy, which, being a staff college, is under the supervision of the Chief of the General Staff of the Army), is lodged in a "general inspection of the system of military education and training," at the head of which stands a general of infantry as inspector general, to whom two officers (a lieutenant-colonel and a major) are assigned as adjutants. Subordinated to the general inspection are—

(1) *The "Superior Military Committee of Studies"* consisting of thirteen officers of high rank, to whom questions affecting the organization, course, and methods of studies of Prussian military schools (except the War Academy) are referred for opinion.

(2) *The "Superior Military Examination Committee"* presided over by a major-general, whose duties will be explained further on.

(3) *The Inspection of War Schools*, headed by a colonel. These schools prepare sword-knot ensigns (*Portépeefähnriche*) of all arms for the so-called officer examination. They are located at the following places: Potsdam, Glogau, Neisse, Engers, Cassel, Hanover, Auklam, Metz, and Hersfeld. There is a similar institution at Munich, Bavaria.

The course lasts from nine to ten months and embraces tactics, manufacture of ordnance and ordnance stores, science of arms, field and permanent fortifications, attack and defense of strong places, military topography, and army administration. Artillery ranges and technical institutes and fortresses are visited by the students.

(4) *The Corps of Cadets*, commanded by a major-general, which consists of young men in training for the position of officer, distributed among six "cadet houses," situated respectively at Köslin, Potsdam, Wahlstatt, Bensberg, Plön, and Oranienstein, whence they are passed to the central cadet school at Gross-Lichterfelde. Except that the pupils are uniformed, armed, and drilled, the cadet houses and the central cadet institute correspond in organization and course of study to the so-called "Real schools" (*Real Schulen*), at which young men are prepared for the higher technical schools (*Technische Hochschulen*). The "Real schools" again bear a certain correspondence to the Gymnasia, graduates (*Arbiturienten*) from either of which are ripe for the university or a higher technical school and need not undergo the ensign examination, the chief distinction between the Real school and the Gymnasia being that special attention is devoted in the former to the dead languages and classics, and in the latter to the sciences. Each of the cadet houses, with a capacity ranging from 150 to 250 cadets, is divided into four classes, designated sexta, quinta, quarta, and tertia, and receives pupils not less than 10 nor more than 15 years old who are physically sound and qualified to enter one of the lower classes suited to their age. The amount payable for maintenance varies according as a cadet comes under the designation of "royal," "boarding," or "outdoor" cadet. Eligible for appointment as "royal" cadets are sons of deceased or invalided officers of meritorious record; of officers of the active army, navy, or gendarmerie; of officers entitled to pension of deceased persons who, though their connection with the army had ceased at the time of their death, had participated in campaigns, and of military physicians and officials with officers' rank; preference being given, in the order mentioned, by a committee sitting in Berlin, to whom the power of appointment is confided. The claims of sons of meritorious noncommissioned officers, and of civilians who deserve well of their country, are also considered. "Royal" cadets are admitted either gratuitously or at comparatively low rates; the "boarding" cadets have to pay each about \$180 annually; and cadets living outside the cadet houses are charged about \$15 per annum. Foreigners whom the Government may deem it expedient to admit pay \$270 per annum for their tuition and maintenance. The following are the subjects taught at the cadet houses: Religion, writing, German, French, Latin, algebra, geometry, history, rudiments of natural philosophy, and drawing.

The cadets at Gross-Lichterfelde, numbering about 1,000, are divided into two battalions and into the following classes: Lower and upper secunda, lower and upper prima, and

selecta. The entire length of the course at this institution depends on circumstances which will be explained in connection with the conditions under which persons are commissioned in the army. A cadet ordinarily passes through a division of the secunda or prima in one year. The study of some of the subjects taught in the cadet houses is continued and the curriculum includes, in addition, tactics, fortifications, science of arms, (*Waffenlehre*), surveying, plain drawing, and the higher mathematics.

The cadet corps of Saxony and Bavaria are similarly organized. Württemberg participates in the Prussian military educational establishments.

(5) *The Combined Artillery and Engineer School at Berlin*, the immediate supervision of which is confided to a commission (*Kuratorium*) composed of the inspector-general of the foot artillery, the inspector general of the engineer and pioneer corps, the inspector of the field artillery, and two general officers.

Second lieutenants provisionally assigned to the foot artillery or engineers (pioneers), who, after passing the "officer examination," have served with their respective arms—the former for two years and the latter for one year—receive their higher training at this school. The course for each arm is separate and consists of an upper and lower one. At the close of the lower course, artillery officers who have passed the prescribed examination (*Berufs-Examen*) are commissioned in their arms as of the date of their original entry therein. Only specially talented foot artillery officers, not exceeding 30 in number, pursue the higher course in a class known as selecta. For artillery officers, the upper course lasts nine, and the lower course ten and one-half months. Second lieutenants provisionally attached to the engineers or pioneers pass through both the lower and higher courses, and their being commissioned as officers of engineers at the conclusion of the latter depends upon a successful passage of the prescribed examinations.

Besides visits to the technical institutes (artillery manufacturing establishments, powder mills, etc.), and other practical exercises, the course embraces lectures on the following subjects:

FOR FOOT ARTILLERY OFFICERS.	<p style="text-align: center;"><i>Lower course.</i></p> <p>Ballistics, artillery material, fortification, siege war, tactics, mathematics, physics, chemistry, geometrical artillery drawing, hippology, French, English, drawing.</p> <p style="text-align: center;"><i>Higher course.</i></p> <p>Ballistics, foreign artillery, construction of artillery, history of sieges, mathematics, physics, chemistry, geometrical artillery drawing, hippology, French, English, drawing.</p>
FOR ENGINEER OFFICERS.	<p style="text-align: center;"><i>Lower course.</i></p> <p>Artillery, fortifications, engineering, mathematics, physics, architectural drawing, fortification plan drawing, hippology, French, English, drawing.</p> <p style="text-align: center;"><i>Higher course.</i></p> <p>Engineering, siege war, construction of waterways, tactics, mathematics, physics, chemistry, plan drawing, fortification plan drawing, hippology, French, English, drawing.</p>

(6) *The Inspection of the Infantry Schools*, with a major-general as inspector, which is charged with the supervision of—

(a) The preparatory "under officers" schools (*Unteroffizier-Schulen*) at Annaburg, Weilburg, Neu-Breisach, Jülich, Wohlau, and the military branch of the military orphan house

at Potsdam, at which boys not less than 15 years old, mostly sons of old soldiers, are, up to the age of 17, prepared for the noncommissioned officers' schools.

(b) The six noncommissioned officers' schools situated at Potsdam, Jülich, Bierbach, Weisenfels, Ettlingen, Marienwerder, all Prussian except the last named, which is in Saxony. At these schools three-year volunteers, from 17 to 19 years old, are theoretically and practically trained as noncommissioned officers. After passing through the course, which lasts from two to three years and embraces reading, writing, arithmetic, German, system of accounts, history, geography, sketching, and singing, the pupils enter infantry or artillery regiments as privates or vice corporals (*Gefreite*)—exceptionally, also, as under officers. The schools at Jülich and Marienwerder are each organized into two, the others into four companies and commanded by a major, with a lieutenant as adjutant. A military physician and a paymaster form part of the staff of each school. To the companies there are severally attached a captain and three lieutenants, a first sergeant and eight sergeants. These officers and noncommissioned officers, as well as a number of field musicians and tradesmen, are detailed from regiments of the line. The total number of pupils at these schools aggregate close on to 4,000.

(c) The school of musketry at Spandau, which trains officers and noncommissioned officers as instructors in musketry for the infantry, cavalry, and pioneer arms.

(d) The military gymnastic institute (Berlin), which trains officers of all arms as instructors in gymnastic exercises and in fencing.

The Bavarian war academy, artillery and engineer school, war school, and cadet corps, are grouped for the purpose of supervision and control under an "inspection of military educational institutes," of which an inspector (a lieutenant-general) is the head.