

making exemption from the ordinary period of compulsory service in the ranks dependent (among other conditions) on educational attainments, the military system has been employed as an engine for stimulating education among the middle classes.

6. The general management of military education is vested in a single officer, the inspector-general. He is assisted by two boards or councils, the Board of Studies in matters connected with the general system of instruction, and the Supreme Examination Board in regard to the examinations and qualifications for commissions. The system of education has been still further centralized since 1850, especially in the case of the war schools, and much of the progress that has been made is ascribed to the unity now given to the whole system of instruction. At the same time each of the educational institutions has its own board of studies, similar to the *conseils d'instruction* at the French schools, who are charged with the general control of the course of study and with the duty of making suggestions for its improvement. Several of the professors, both civil and military, are always members of this board; so that the benefit of their practical experience is secured, and the control of the instruction is never left entirely in the hands of one man, nor even exclusively of military men. The introduction of the civilian element into these boards is deserving of notice; not merely the professors of the schools, but eminent men connected with the University of Berlin are employed upon them, and have a voice in determining the system of military education. The long period for which individuals are retained in posts connected with the direction of the educational system has been previously noticed—appointments on the board of studies and the examination board are to all intents and purposes permanent. It is considered that the benefits of experience would be lost by frequent changes of the members.

7. In discipline the heads of the various schools are almost entirely supreme. At the war schools the young men are subject to military law, being already in the army; at the cadet schools this is not the case, but the discipline is strictly military in character. At both establishments the regulations are extremely stringent, and the slightest irregularity entails punishment. But the importance attached to the exercise of moral influence over the pupils, the personal interest taken in them, and the kindly relations existing between them and the officer, make the system of discipline much less rigidly military than it is at the French schools. Both at the war schools and the Cadet House specific punishments are attached to idleness.

8. In the appointment of the heads of the various schools and of the subordinate officers employed at them, great attention seems to be paid to selecting individuals fitted for the posts both by educational experience and by personal qualities. There appears to be rather a general opinion that the instructors at most of the schools are underpaid, and that this, combined with the preference frequently given to active military life, prevents the posts being much sought after by the ablest officers. On the other hand, however, selection for such appointments is always regarded as a distinction; and in the Prussian army mere honorary distinctions, altogether irrespective of material advantages, are held in much higher estimation than is probably the case in any other service. As a general rule there is no fixed limit to the tenure of appointments,

but in practice they are seldom held continuously for more than five or six years.

9. The most marked point of contrast between the French and Prussian systems of military education consists in the thoroughly competitive character of the former. In Prussia the principle of competition, though to a certain extent recognized, is little applied in practice, and never perhaps fully and strictly carried out. For promotion to the highest class (the *Selecta*) of the Berlin Cadet House there is considerable competition among the pupils, and admission to the War Academy is obtained by competitive examination open to all the officers of the army; but even in these two cases personal and other considerations come more or less into play, and the rewards cannot be said to be thrown open to pure competition. All the other military examinations are simply qualifying, and there is no attempt to afford the stimulus of publishing a list of the candidates arranged in order of merit. In fact the term "competitive examination" scarcely seems to be understood in Prussia. The pecuniary assistance afforded by the State for the education of boys in the cadet schools is dependent solely on the circumstances and services of the father, not on the abilities of the candidate himself. Few material advantages result from success in any of the examinations. At the same time, in nearly all cases the honorary distinction of being reported by name to the King is held out as a reward to those who display special ability. And this distinction, owing to the great personal influence exercised by the Sovereign over promotion, is probably more than a mere empty honor.

10. The objections expressed to the introduction of a competitive system such as that existing in France have been mentioned in the account of the war schools. They appear to be universally entertained in the Prussian army. Of all the officers with whom the question was discussed, one only advocated the adoption of competition as an element of military education. Of the others none foresaw any advantage from its introduction, while the great majority entertained a most decided objection to it. The object in Prussia seems to be, not to attempt to establish an accurate comparison of the educational attainments of a number of individuals, but to form a general estimate of the abilities, character, and military capacity of each. The army generally are not considered to be losers by the rejection of the competitive principle; the system of inspections and of reports from inspecting officers is so elaborate, and so many checks are provided, that the character and abilities of individual officers are well known, and appointments certainly, as a general rule, are said to be made on the ground of real merit. Even at the less advanced schools, such as the Cadet House and the war schools, without the stimulus of competition, though there may be fewer instances of intense study on the part of individuals, there is said to be fair industry among the whole body of students. At the same time the great inducement to exertion afforded in a country where military service is compulsory, by the desire to escape duty as a private soldier, must not be forgotten.

11. It must be noticed that there is (probably in part owing to the absence of competition) some vagueness in the standard of all the Prussian examinations. There appears indeed in general to be less strictness in enforcing the regulations connected with military education in Prussia than in France. The regulations themselves are very stringent, but exceptions are constantly made

tioned—for instance, in the length of time which a pupil is permitted to remain in the same class at the cadet schools in the number of failures allowed in the various examinations, etc. There is an evident disposition to put as lenient an interpretation as possible upon all regulations.

12. The very great care bestowed upon the method of instruction at all the Prussian military schools is extremely remarkable. Individual instructors are not left to follow out their own ideas of teaching, but careful regulations are issued for their guidance by the Inspector-General of Education, to which all are required strictly to conform. The system of small classes, in striking contrast to the French plan of lectures to large numbers, is a remarkable instance of the anxiety to devote attention to individual students, and to adapt the instruction to varieties of ability. But the most remarkable feature of the system of teaching is the care bestowed upon the higher objects of education, upon forming and disciplining the mind and encouraging habits of reflection. The regulations for the instructors at the various schools over and over again assert that the great object to be kept in view is, not merely to impart a certain amount of positive knowledge, but to develop the intellectual faculties and to cultivate powers of thought and reasoning. The teachers are warned to avoid minute details and barren facts, which merely burden the memory and are soon forgotten, and to direct attention to broad principles, which will lay the foundation for further individual study in after life. With the same object in view, the examination questions are calculated, not merely to serve as an exercise of the memory, but to test an intelligent acquaintance with a subject, and the power of turning knowledge to a useful purpose. The specimens of the examination questions which have been given, will show how much the Prussian system in this respect differs from that pursued in English military schools. In the Prussian method of instruction there is almost an entire absence of the minute detail as to numbers, dates, and facts to which so much importance is attached in all military teaching in England. The system pursued in regard to private study is in accordance with the same principle of aiming at the development of the mind. The students are not, as in the French schools, forced to work under the constant supervision of instructors, but are left to study in private, in order to teach themselves reliance and to encourage habits of work. The great importance attached at all the schools, and more especially at the War Academy, to the cultivation of special talents, is also a striking feature of the system of instruction; the attainment of a high standard in individual subjects is made an object of much greater importance than average acquirements in all.

13. In conclusion a few points of detail may be noticed, in which the course of instruction at the military schools both of France and Prussia presents more or less contrast with that followed in this country.

In neither country are mathematics made an important element in general military education. In France the artillery and engineers receive a very high mathematical training, but for the line little mathematics are required; at St. Cyr the subject is scarcely taught, and even for the staff corps the knowledge demanded is limited to what is practically useful for surveying. In Prussia a knowledge of mathematics up to trigonometry is required for admission to the army; but the subject is not taught at the war schools in connection with the profes-