

The Swiss were, I believe, the first to introduce the general use of the small bore in military rifles, and at all events their troops of the two first categories of service have for upwards of two years been thoroughly trained and accustomed to the use of breech-loaders.

A general compliment may likewise, I believe, be paid to the Swiss field artillery, and especially to the light mountain howitzers, which are admirably adapted to the topographical condition of the country. They are 3-pounders, with carriages so disposed that in case of need the several parts can be carried on men's backs.

Annual drill excursions are made with these among the higher Alpine passes, and the ease and readiness with which these pieces are transported, even where the mule is no longer available, would astonish those who are not familiar with the high Alps and its sturdy inhabitants. The 4-pounder batteries are of cast steel, on Broadwell's breech loading principle, the 5-pounders of bronze, on the Prussian wedge block system (Keilverschluss). The Swiss were the first to use iron gun-carriages. Rocket batteries and also field artillery of heavier calibre than here mentioned, have latterly been done away with. As a rule, the men assigned to the artillery take to their work kindly, and learn it with surprising alacrity. The great difficulty in this branch of the service, and still more in the cavalry, lies with the horses. If the training of the men can only be eked out by a superior intelligence or special aptitude on their part, it is obviously quite the reverse with animals whose owners, in their every day avocations use them for utterly different purposes. It is next to impossible, in the short period of annual drill to get the horses used to work together. The train companies are generally manned by coachmen, carters, ostlers, and their class, but even they are not accustomed to the sort of driving required, especially with strange horses. This is one of the grave defects which might become painfully evident in actual campaigning; and even in the mere peace-drill, the accidents and damage arising from this cause are disproportionately numerous. Only a very limited number of horses, and these for the use of the superior officers of the Staff, are permanently kept on hand by the Federal Government. The mass has to be provided by the cantons. The selection, appraisement before and after service, the indemnities to be paid for damage incurred &c., naturally lead to a good deal of jobbery, which is not calculated to raise the efficiency of the mounted services. It is endeavoured to do away with this defect in some degree, by making, as we have seen, the duty of the mounted soldier more continuous in the earlier stages of his liability, and then either wholly or in part, exempting him from the reserve and *Landwehr*.

Some difficulties are also placed by recent enactments to the owner's disposing of a horse which has once been accepted, and substituting a new one. The value of the horses, according to the service for which they are taken, varies largely—from 400 to 1,200 francs, say 15*l.* to 50*l.*, for horses are by no means cheap in Switzerland.

Besides a generally low standard in this respect, it must be added that the state of the gear and accoutrements leave much to be desired, and seldom comes up to the smartness of other countries. The men have scarcely an opportunity of "getting up," the very important points connected with stable duty, which from the nature of the case in peace drills falls mainly upon the non-commissioned instructors appointed by the Federal authorities.

The time apportioned to the drill, both of instruction and repetition, will strike most of my hearers as surprising short and insufficient. It is for the recruits of the engineer and artillery corps respectively 48 days: for the cavalry—dragoons, 55 days and the guides 41 days; for the sharpshooters, 31 days. At repetition drill the engineers and artillery are generally called out for 14 days, and the cavalry every year for 7 days.

In the infantry the recruit is drilled during the first year for 31 days, and each year following for 6 days. The cadres, that is to say, the officers and non-commissioned officers, are called in one or two days earlier than the file. The drill from the first is, so far as circumstances will admit, by tactical units, and for this purpose the Federal military districts correspond to divisions of the Federal Army, the cantonal military districts to brigades, battalions, or, in special cases, half battalions. In all drilling subsequent to the instruction of the mere recruit, the different arms are to act conjointly, and where any of the smaller cantons lack any special arm, such as cavalry or artillery, they are to unite with the neighbouring cantons for the practice of their men, and any additional expense arising therefrom is borne by the Confederation.

Men who, from any cause, have not performed their duty in the first category of age are liable to recruit's drill upon entering on the next following category.

The drill in all its stages is hereafter to be directed by Federal instructors of various grades, corresponding to the importance of the troops collected together.

The prescribed maximum of annual drill is exclusive of such field manoeuvres in a larger scale as the Federal Government may from time to time order, and, in point of fact, executed generally every two years. Care is, of course, taken that the service for this purpose does not, in the long run, fall more heavily upon some one or more cantons than upon others.

The theory of the law assumes a sort of general expropriation for military necessities, of course against suitable indemnification, and, therefore, everything needed for the troops may under certain circumstances, and in a duly prescribed form, be requisitioned.

Slight and apparently insufficient as the training is, as compared to standing armies, it must be kept in mind that the Swiss unquestionably possess a special aptitude for military service. In many of the mountain cantons every man is more or less by profession a hunter, and therefore, a marksman. Nearly every village has its shooting range, and cantonal and federal "*Schützen Vereine*," or "Riflemen's Associations," constantly bring together vast gatherings of practised shots to a great holiday and jubilation. Moreover, the policy of assigning each man to the branch of the service for which he is best fitted by civic occupations—the boatman to the pontoniers, the machinist to the engineer corps—greatly facilitates the task of the instructor.

It is in this, and in the peculiar character of the Swiss, and the circumstances of their social life—as I intimated at the outset—that the so-called Swiss system really consists, rather than in the clauses of the Federal legislation, and its application by the cantonal authorities.

The Swiss have as a rule, an excellent primary school education to begin with. From an early age, in some cantons as early as nineteen, he is called on to take an active interest and part in public questions. Some of the smaller forest cantons, as is well known, still preserve the primitive form of

a pure democracy, so that the Legislature, or *Landsgemeine*, consists of every male in the canton. But even some of the large cantons such as Zurich, provide for their citizens an amount of participation in public business which would simply be impossible anywhere else. The most minute questions of cantonal legislation or administration are constantly and habitually submitted to the popular vote. All offices are elective. Revisions of the constitution are frequent, and debated with vehement partizanship. Societies for every conceivable public purpose are more numerous than even in England. If this political activity may justly be considered excessive, it has at least this effect, that even the lowest average capacity, is associated with the public business, that each readily conforms to an obligation which he may be said to have imposed on himself and finally that is thoroughly accustomed to co-operative action. Where all these circumstances do not exist in the same degree, I cannot bring myself to believe that the Swiss military system would give the same results. As it is, the Swiss militia, as a whole, present a body of men of highly creditable efficiency and discipline. Where it is most open to criticism is in the general average of its officers.

I need say little of the Federal Staff, which, in its composition and organization is not essentially different from that of any regular army, and numbers many men of distinguished ability. I may only remark, in passing, that promotion beyond the rank of captain is by selection in contradistinction to seniority. The superior officers of the several departments, the Federal Legislature and also the Cantonal Governments, may present nominees, but the appointment lies in time of peace with the Executive Council of the Confederation, and in time of war with the Commander-in-Chief. The latter is always elected *ad hoc*, and for the duration of a campaign, with but little, if any restriction as to choice, and during his functions enjoys an almost dictatorial authority. When these terminate, he retains merely an honorary rank.

The appointment of the Cantonal officers, that is, the whole mass of the officers of the "tactical units" comprising the Federal forces, is one of the most peculiar features of the system. Formerly, and to a great extent even yet, the cantonal authorities had the widest discretion in this respect. Some degree of uniformity is now sought to be established by the enactments in the new Army Organization Bill. According to these, every commissioned officer must previously have served as a non-commissioned officer, and he must be recommended by the other officers of the "tactical unit."—i. e., battalion, battery or company to which he belongs. The non-commissioned officers are appointed by the commandant of the battalion, after consultation with his officers and non-commissioned officers. The grade is only then definitely conferred, when the nominee has passed successfully through a prescribed course of instruction at the respective Federal schools of his arm. It will impress my hearers as highly characteristic and significant that the acceptance of a grade for which he may be qualified is obligatory upon every man liable to service. Every cantonal Government is required to send to the several federal schools of officers' instruction annually at least as many qualified non-commissioned officers of each arm as may be needed to fill the grades in its contingent for the next ensuing year. Besides the Federal schools for each arm, there are special staff schools for instruction, subdivided into general staff, sanitary, commissariat, veterinary, &c. Annually some few