

in this country, where we can register the velocity of a shot before it leaves the gun. A report upon the education of artillery officers is already in the hands of the War Minister. Judging by the distinguished names of the committee, and the fact that the evidence of no less than fifty-four artillery officers has been taken, I have no doubt but that their recommendations will be duly considered and acted upon. The committee at all events have the full confidence and respect of their brother officers of all ranks.

My readers have not realized the expectations raised by the title of this lecture, which has been turned somewhat from its intended course, for two reasons. It would ill become me to anticipate or guess at the details of the report before alluded to upon the education of Artillery officers, upon which I was called to give evidence, still less to anticipate that of the Committee on the Classification on Gunners and Drivers, of which I have lately had the honour of being appointed Secretary.

In conclusion, it must be borne in mind that the real brunt of all fighting is borne by the infantry; and it must not be supposed that I forget this fact, because I am treating only of artillery. No man appreciates more highly than I do the resolute British infantry "*Nulli secundus*."

There is in our army a class found in no other; officers who at their own peril and private expense hang about contending armies to gain military experience; discouraged by the State, thwarted, and sometimes arrested by both sides. They obtain for us that knowledge which our Government freely offers to all our possible enemies.

Much valuable information has been given me by Col. Smythe, R. A., and the artillery brothers, Brackenbury, who have "*en amateur*," encountered the fatigues and dangers of many campaigns. I am indebted to Lieut. Cunningham, of the Artillery, for the highly artistic drawing of a position covering a strategical point, viz., the bridge. Lieut. Gardner, of the Royal Navy, like a true brother blue jacket, has assisted me with plans.

THE SWISS MILITARY SYSTEM.

The following is the text of a very interesting lecture given by M. Hotze at the United Service Institution, and now published in that Society's Journal:—

M. Hotze said: My esteemed friend, M. Frederich von Martini, has deputed me to accept on his behalf, or rather to share with him, an invitation from this institution to give some account of the Swiss military system. We both feel flattered by this invitation, and both of us—ho as a naturalized Swiss, and I as a Swiss by birth—take somewhat of a patriotic interest in the subject. It may be well, however, to state at the very outset that we do not propose to make an unqualified eulogium of the military institutions of our country, still less to recommend them for universal imitation. These institutions do not derive their origin from legislative enactments—in fact, the statutory and documentary material available for studying them is singularly scant and meagre; but they are identified with the earliest traditions of the miniature common-wealths which form the Swiss Confederation. They are the expression of a national character which is in many respects peculiar, and in sharp contrast with that of surrounding neighbors. These institutions, moreover, exist and flourish by virtue of social, politi-

cal, and geographical circumstances, which are not to be found elsewhere in the same or even analogous conjuncture. The underlying principle of the system—if system it can properly be called—is doubtless a sound one and one which is susceptible of being applied in many other than the Swiss manner. It is in the more or less judicious manner of this application that the whole question lies, whether or no the military institutions of Switzerland afford a useful model for the reorganization of those of Great Britain.

So much has, especially of late, been written on the subject before us, that the broad general facts are abundantly familiar. I take it, therefore that what the members of this institution are chiefly interested in is the practical every-day working—the inside view, so to say, which can only be obtained by personal observation. This, asking your indulgence in advance for many shortcomings, it will be my endeavour to give.

The liability of every Swiss to military duty, which is a fundamental article of the Swiss Federal Constitution, is not only a duty, but also a privilege. In theory there are virtually no exemptions, but there are some exclusions. No one not in full possession of all his civil rights—as, for instance, through bankruptcy—is eligible to the grade of officer. Any one having undergone an infamating punishment is excluded from the ranks. Formerly, in most or all of the cantons, and I believe in some still to this day, the Jews were, by a remnant of barbarism, under certain civil disqualifications, and therefore exempt, or rather excluded, from military service. In theory also (I purposely, for the moment, confine myself to the theory of the law, for we shall presently find in the practice some very considerable departures, and even some flagrant contradictions), in theory not only does every able-bodied man owe *wehrpflicht*, or military duty to the State, but he owes this duty in that form or branch of service for which his civic avocation or occupation best qualify him. Thus, the parson becomes a chaplain, with the rank and pay of a captain or a colonel, as the case may be, and if the clergy as a class enjoy practically a certain exemption from duty, it is simply because the troops require fewer chaplains than other officers. The same applies to physicians, who, within the limits of military age, are each and all liable to act as army surgeons, in such numbers as the service may require. Teachers have hitherto had some special exemptions, at least in so far as certain practice drills (*Repetitions-Curse*) might interfere with their regular duties. It is now proposed that after four years from the date at which the present Military Reform Bill shall have become law, no one shall be eligible to any situation as a teacher in a public school who does not possess, and can give satisfactory proof of having gone through, the military instruction required for the qualification of a subaltern officer of infantry.

The law provides for the formation of corps not strictly military in the technical sense, such as telegraphists, railway and other machinists, and mere labourers. Thus if a man is, we will suppose, below the standard stature for any special arm, but otherwise sound and serviceable, he is, according to his trade or occupation, made useful as a farrier, or armourer, or hospital nurse, or *frater* (a sort of ambulance attendant, who is generally an apothecary or apothecary's assistant), in which respective duties he will rank as a non-commissioned officer; or he may serve as a mere mechanic, or even labourer; or again he may be employed as a clerk in some of the Staff bureaux.

Similarly, each man is allowed, subject of

course to rules and regulations, to select the arm of the service which he prefers from taste; or if necessary, the military authorities of his canton may assign him to that arm for which he is obviously best fitted. Thus, the man who, either for pleasure or profit, rides or drives his own horses, selects by preference the cavalry or field artillery service. These two arms thus become manned and officered, besides the young men of leisure and means, by the millers, tanners, brewers, corn dealers, &c. In like manner the Engineer corps and its several branches, officers and men, are composed of Engineers, surveyors, contractors, builders, machinists, and cognate professions.

I am here illustrating a principle. How difficult the application of this principle would be in this country must already have suggested itself to my hearers, and in due time we shall have to describe how its application even in Switzerland affects the efficiency of special branches of the service.

A liability to military duty so sweeping as to be theoretically without exception, save absolute bodily infirmity would probably be intolerable in any other country, and would in truth be in most other countries the most expensive of all conceivable forms of military organization. It is not so in Switzerland. There it is a thing of immemorial origin. It chimes in with the history, the traditions, the popular instincts, the "*folk lore*," as the English language so expressively calls it, of the land. The social life has long since and unconsciously shaped itself according to the necessity of the system. The merchant or manufacturer knows that his book keeper, or cashier, or other *employé*—the mechanic that his journeyman or his apprentice—has so many days or weeks of drill, or practice, or field exercise to perform. Employer and employed are probably subject to the same liability, and manage to take it by turns, but in any case the current civic business of the country goes on without interruption. I will not say that in many instances, such as the necessity of suddenly placing large bodies of troops on the frontier, and their prolonged maintenance there, which occurred during the late war, does not cause much individual hardship and loss. But these exceptional cases are nothing compared to the heartburn, the breaking up of family ties, the dread of military duty, which conscription in its mildest form involves. The Swiss are essentially a hard-headed, hard-working, frugal but by no means a stolid race. They love above all things a holiday, when a legitimate pretence for it presents itself, and this is afforded by the recruit's drill, the reception practice, and the occasional field manoeuvres which constitute each man's military duty. He takes that duty seriously, because he is proud of it, but pleasantly also, because it is an occasion for social gatherings, and for friendly hob-nobbings, for confirming old acquaintances, and making new ones; for bringing men of different cantons, often astonishingly different in manners and modes of thought, into companionship. And all this with an amount of zealous bustle and conscious self-importance which supplies the keen stimulus of excitement.

It should be added that, however severe in theory are the laws on military obligation their application varies very much in the different cantons, is in none of them extremely stringent, and certainly never oppressive or vexatious. The contingents supplied by the several cantons to the different divisions of the federal armament, fall far short of the actual number of able-bodied, and thereby legally liable men, within the