EDUCATION OF BOYS BY THE MILITARY METHOD.

BY MAJOR R. L. GIGNILLIAT.

The Culver Military Academy has been especially fortunate in that the generosity of its founder, the late Mr. H. H. Culver, of St. Louis, and the continued munificence of his widow and sons, have enabled it to include in its equipment, without regard to expense, all those military features which are most apt to appeal to a boy's interest and in the learning of which he is most apt to acquire a good physique, nerve, alertness, good judgment, and all those other qualities that will make of him an effective, capable man.

The cavalry department doubtless stands pre-eminent among these special provisions. The building of a large, well-equipped riding hall, and the purchase of a troop of forty suitable horses, involved no little outlay at the start and is an item of considerable expense in maintenance, but that it pays big dividends in the making of fine physiques and in the development of patience, perseverance, and grit, there can be no doubt. The American boy has a natural liking for the horse, and a natural aptitude for riding, and when there is added to this the glamor of the cavalry features, it becomes irresistible indeed. The cadets of the Culver Black Horse Troop have acquired a reputation for their horsemanship that is not altogether undeserved, for in their rough riding they perform many feats of horsemanship that a professional performer need not be ashamed of. This is all the more remarkable, in that many of these youngsters got on a horse for the first time when they joined the troop. Natural aptitude plus keen interest and proper instruction works remarkable results.

The history of the buying of the troop tends also to add somewhat to its *esprit de corps*. The first horses of the troop were those that proudly paraded Pennsylvania Avenue at President McKinley's first inauguration, as the mounts of his personal escort. They were bought from Troop "A" immediately on their return from Washington. A tradition of the old Troop "A" is still retained in the naming of the horses, the name of each beginning with the initial letter of the troop. There are Agility, Aguinaldo, Airy, Ace of Spades, and forty-five others, and in the last stall Amen. The cadets learn to ride as do the troopers of the regular cavalry, without saddle, the horse equipped with a watering bridle, blanket, and surcingle. They start out awkwardly enough, clambering laboriously to their horses, and sitting them like the proverbial sack of meal. In a few months, however, they spring lightly from the ground at the word of command, and land clearly on the horse's back. They do this at the trot and at the gallop, and vary it by mounting to a standing position, or by turning in air so as to land facing the croup, or perhaps vault entirely over the galloping horse, and then mount from the off side. They ride standing and take hurdles while in this position; some of the more expert even stand facing to the rear. Then, not content with the feats of the cavalryman's "monkey riding," they link three, sometimes even four, horses together, and, spanning the inner horses Colossus of Rhodes fashion, go dashing about the hall, taking hurdles, dismounting, mounting, and vaulting in true Græco-Roman style. It is indeed an inspiring sight to see these youngsters performing these feats of horsemanship of the ancient hippodrome standing on their flying horses as lightly as a mosquito hawk on a swaying reed, the embodiment of youthful daring and youthful grace. And what training it is indeed for eye, nerve, and muscle! The Græco-Roman picture shown in this article was the model used by Zolnay for a life-size bronze statue that was placed on exhibition in the east entrance of the Palace of Education at the St. Louis Fair. It attracted much attention by its spirited appearance, and was awarded a medal.

The less spectacular but more practical cavalry features also receive their share of attention. The troop is drilled in the saddle, and the cadets are taught the use of the saber, the carbine, and the pistol. On holidays they frequently make long road marches, with halt for lunch and the interesting details of a picket line and a camp fire. Possibly during the march they ford a stream; their carbines pulled from the boots are carried on the shoulder to keep them dry, and the rider's legs are stretched along the horse's neck, to keep them out of the water and to guide the horse.

The government furnishes modern breech-loading field pieces for artillery drill, and this instruction is given to cadets in the upper classes. They are taught how to load and to fire the piece, using blank cartridges. At Culver some of the black horses are then drafted into service, and the cadets are taught the mounted drill with all its dash and excitement. Cadets who have been well trained in the cavalry department are mounted as drivers, and it is indeed an interesting sight to see them cracking their long black whips and expertly guiding their teams as they gallop through the movements of "Action Front!" and "Action Rear!" and the other evolutions of the drill.

The Gatling-gun drill too has its element of interest, and the cadets have established a record for making a hundred yard run and going into action in 26 seconds. This was done in an exhibition the cadets gave on Culver Day at the St. Louis Exposition.

A record of constructing a rope and spar bridge, 26-foot span, complete to the tying of the last knot, in 4½ minutes, is a record of which the cadets in the bridge-building detachment also feel proud. An important feature of their military training, and one in which the cadets also take a great deal of interest, is their rifle practice on the range. They shoot at two, three, and five hundred yards, and some very creditable scores have been made. Marksmen's and sharpshooters' badges are given the cadets under the same qualifications as those prescribed for the National Guard. A soldier should be taught not only how to shoot straight, but how to protect himself under fire, and this also figures in the cadet's instruction. He is taught how to dig shelter trenches for the three positions—lying down, kneeling, and standing.

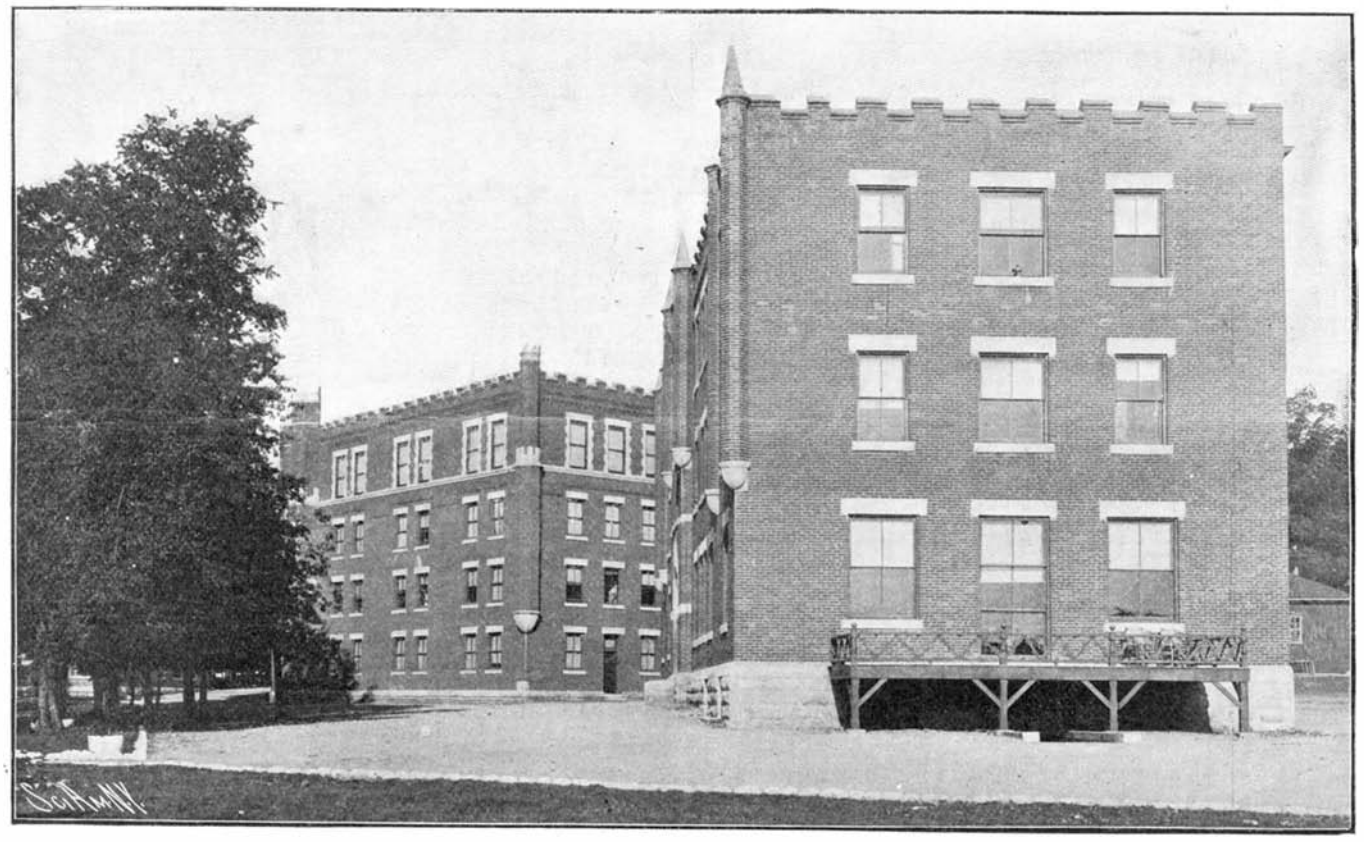
The infantry drill, however, is in a way the most important of all the military instruction. The battalion of infantry is in all military schools the basis of the organization for both military instruction and discipline. The manual of arms and the close-order drill, with their machine-like precision, are wonderfully effective in teaching a boy a regard for details. Then there are the extended-order movements, with skirmishes over the surrounding country and attacks with blank cartridges on an imaginary or represented enemy. These are what the cadets enjoy most of all.

When the weather permits there is parade at sunset. The cadets, drawn up in a long, motionless line, made resplendent by glittering brasses and snowy-white cross belts, stand at parade rest while the band "sounds off." Then the evening gun is fired, the battalion is called to attention, and while the band plays the "Star-Spangled Banner," the national flag is impressively lowered. This is a ceremony that never loses in effectiveness by being repeated, and one that is calculated to arouse a boy's patriotism if anything will.

There are other details of the cadet's military training besides these matters of the practical drill. There is the marching to meals and to classes, company inspections to see that all linen is clean, clothing brushed, and shoes polished; room inspections, where the officer passes a white-gloved hand over the furniture, and many other things that cannot be mentioned here. And lest the impression should be gained from this description of a cadet's military instruction that he does naught else save drill and perform military duties, let it be said that he does quite as much studying as the student of the non-military school, and does it with clearer head by reason of his regular hours and abundant exercise.

There is an hour or so of recreation that figures in his day's routine also, and what it lacks in length is compensated for by the extra zest that is lent to it by the close attention to duty during the rest of the day. The cadet finds time also to distinguish himself in athletics. As a matter of fact, the military instruction by its enforced system might almost be said to create the time it uses, and it in this way trenches in no way on the time for the other important things of a boy's education.

All that has been said so far has been with reference to the military instruction as a means of teaching boys to become effective citizens. The government, however, regards this military instruction as an end in itself, for it appreciates the value to a nation dependent largely on its citizen soldiery in time of war, of having so many of its youth each year well trained in the soldier's calling. The government, therefore, encourages this military instruction in schools by detailing officers of the regular army to a certain number of colleges and military academies in each State, and by issuing to these schools rifles and equipment and a liberal yearly allowance of ammunition. The institutions to which officers are thus detailed are divided into three classes, A, B, and C, according to the extent of the military instruction they give to students. Class C comprises those which devote the most time to the military instruction, and regulate the cadet's daily duties by the same sort of routine in force in a military garrison. It is the instruction given in schools of this class that it has been the intent of this article to describe.



One of the Fireproof Military Barracks.

EDUCATION OF BOYS BY THE MILITARY METHOD.

Makes the Water Pump Itself.

A current motor conceived with reference to its use in connection with irrigation has recently been patented, and is now being introduced throughout the Western States. The mechanical principles upon which it is constructed are those of deflection and leverage, which until now have never been combined for purpose intended. The current pressing against a sheet-iron blade resting in the stream and placed at an angle to the current, causes the blade to swing back and forth. The force generated is communicated through a lever back to pumping mechanism or other machinery. After lever has reached the limits of its sweep, the blade is forced automatically to a reverse angle to that formerly occupied, which causes the blade and lever to travel in an opposite direction until limit is again reached, this performance continuing without introduction of any other power than that furnished by the stream and without any attendance or supervision. The lever or sweep is hinged to supporting timbers, so as to make the motor self-adjustable to any stage of water. All parts are above water, thereby making it an easy task to oil and keep in repair. The expense is confined to first cost of plant and installation, and the absence of any cost incidental to operation and maintenance makes it the cheapest known irrigating device, and by reason of this fact it will doubtless appeal to those interested. The inventor of this motor is Mr. John Roeh, of Spokane, Wash., corner Riverside and Post Streets.