with onerges of 27.5 to 35 lbs of powder, I projectiles from 116 to 180 lbs., capable of perforating 6 inch of iron at 1,000 yards.

The monitors are deficient in speed, though formidable antagonists at close quarters; their sphere of offence does not extend beyond 500 yards, which might be increased to 3,500 yards, by the substitu-tion of an efficient rifle of the same weight. 10 inch or II inch calibre for the 15 inch smooth bore. Various projects have been brought forward to convert our present smooth bore guns into rifles, but these are all makeshifts, permissible in time of war, but unpardonable waste in peace. Our futile efforts to utilize the old small arms should warn us to make no expenditures in this direction. Other nations possess much greater stocks of convertible guns, but none have thought fit to so convert them, nor can they be converted to breech-loaders, which I consider the essential leature in any rifled system. A writer in the Army and Navy Journal of February 28, 1874, gives a summary of the objections to converted guns which I commend to your perusal .- U.S. Army and Navy Cazette.

## THE NEW CAVALRY TACTICS.

The new cavalry tactics, assimilated to Upton's Infantry Tactics, are ready at last, and are comprised in a volume about onethird thicker than the infantry book, but almost, equally convenient. Printer and publisher have alike done themselves credit in these handy little pocket volumes, of which the typography is beautifully clear, while the thin, tough paper admits (in the cavalry volume) of 530 pages, in a marvellously convenient and portable form, The illustrations in the School of the Soldier are also very superior in execution to those usual in military books, and seem to have been outlined from photographs, judging from the ease and grace of the attitudes, and the correctness of detail in all cases. Being set in with the type, they are also convenient for reference, and a great advance on the old method of illustration. When we come to the matter of the cavalry book, we are obliged to confess that the work has not been done with anything like the concise completeness evinced in the Revised Infantry Tactics; and whereas the short preface to the latter work gives good and cogent reasons for the movements prescribed, written evidently by one who feels suro of his ground and has thought deeply on the subject, the compilers of the cavalry tactics are content to test on the authority of G.O. No. 6 of the War Department, July 17, 1873 which curtly announces their adoption.

As far as the mere evolutions from line into column, and vice versa, are concerned, they are almost indentical with the corresponding infantry movements. In the dismounted drill there is no sensible difference.

Mounted, the substitution of single for double ranks enables the same commands to be used in most cases. In the School of the Regiment three battalions are used instead of one, closely assumilating civalry regimental movements to those of a brigade of infantry. The single rank formation rendering dress parade, in line, of a mount

Bonarges, line of platoon columns is substituted therefor, and line of masses is also allowable. Brigade movements mounted are not prescribed to be made by general commands, but by despatched orders and bugle calls. So far as all these movements, and those of divisions and corps, are con cerned, the changes are in the right direction, and the Cavalry Tactics are amply sufficient to meet all the necessities occur ring in manouvring either large or small bodies of horse, in the simplest and most rapid munner.

It is in the individual instruction in the points which make the essential difference hetween the cavalier and the footman that the work of the officers who compiled the new mounted tactics has been left incomplete, and the opportunity for a radical improvement in those matters which do not affect mancouvres left all neglected. As the new tactics stand, our cavilry are really deprived of the right to be called "cavalry." Mounted rifles, dragoons, mounted infantry they may be called, but the fact remains that the new tactics deliberately consign them to a future in which their main de pendence must be only their firearms, and in which the sabre will be a nearly useless encumbrance. As the tactics now stand it would save the Government a good many dollars, and our so called "cavalry" much needless trouble, to have every sabre used by an enlisted man turned into the arsenals.

That these remarks are not too severe will appear when we mention that the old U.S. Sibre Exercise, with all its useless flourishes and cuts at the empty air, is retained in the new tactics, substantially unchanged save by the addition of two parries on the left which are really only one. There is absolately no provision for fencing between the men, and under the new tactics, as under the old, regiments will be put into the field to charge an enemy with the sabre, when (if they have followed the tactics) not a single man has ever crossed swords with an antagonist. The question what confidence can men so trained put in their swords?-is easily answered by the experience of our late war. The sneer that has been so often thrown at our cavaly by foreigners, that it was nothing but "mounted infantry," was, unhappily, true as regarded our horse in general. In some individual regiments, by a disregard of the U S. Tactics, the men were made into fair swordsmen, and would charge with the sabre. Wherever the trictics were obeyed, charges were almost a nullity, and firing the only real resource of the so-cilled "civalry." That this state of things is satisfactory, seems to be the conviction of the United States cavalry officers on the board of revision. In our own opinion their position is decidedly illogic-l. Either they should abolish the sabre entirely, if they distrust its efficier, or they should give it a fair chance; to be used as a weapon, not as a toy. Un fer our present system it is nothing but a toy. In the French cavalry, from whose drill our sabre service is drawn some of the deficiencies of the exercise are obviated by the presence of a Maitre d'Armes in every regiment and by the practice of fencing Even under this modification their cavalry suffered heavily during the German war, when opposed to the Ger man cavalry, which pursues much the same system as the English. All the accounts accessible prove this to have been the case whenever they came in collision with the sabre. Whether it is safe for mounted

negative, at long intervals, and yet the tendency, since war was first made a science. has always been for mounted troops to relapse into the old vicious track of dopendence on manouvres belonging to infantry. in default of properly instructing the cavaliers. In every case where the experiment his been tried against pure civalry, the result has been disaster. The Roman cavalry frequently fought on foot, till Hannibal's Gauls overwhelmed them at Canno. Afterwards, Casar was compelled to employ those very Gauls to supplement his defi cient Roman cavalry. Fifteen centuries elapsed, when Gustavus Adolphus found the mounted troops of his time in the same essentially vicious condition of dependence on fire. He abolished it, substituted the rapi I charge, sword in hand, and overthrow his opponents, leaving the Swedish cavalry a legacy of superiority which it retained. nearly a century later, under Dharles XII. In Prussia, the Great Frederick repeated the same lesson before the Saven Years' War and made his cavalry, from the poorest, the best in Europe, a model confessedly unequalled ever since. From his time cavalry has been declining in standard to the present day, when it has reached much the same relative point as when Frederick marked its faults at Mollwitz Our cavalry generals, all over the world, with the single exception of Sheridan perhaps, are afraid to trust their horsomen in pitched battles of all arms. Our own revised cavalry tactics leave them in the old rut, by denying the men a practical sabre exercise, and any means of attaining confidence in the true weapons of the cavalier. That this is literally true will be confessed by any swordsman who looks at our sabre exercise, and compares it with the English or German. When it comes to actual practice, we find the English and Germans fencing all the time, with a love for, and confidence in their weapon, entirely absent among our men, simply because the latter never use it, except to cut at the air, till the day of battle comes, when they feel perfectly green, not knowing how to guard against cut or point, except those laid down in the books.

In dismounted fighting, the new tactics make no provision for leaving the sabre with the saddle. Considering that this is a matter of absolute necessity for such service, the omission shows great carlessness. The chapter on horses seems to be a heterogeneous milanje evolved from Baucher, a few general orders issued on the Plains, and the muer consciousness of the compilers. The "directions for shoeing" are especially careless. To be brief, while we cannot deny that a certain advantage has been gained for mannuvring purposes by the assimilation of the tactics of the two arms, it is equally clear to us that the cavalry service has suffered by the change in its essential qualities, rapidity and dash. This has almost always been the case where infantry and artillery officers have assumed command of cavalry, and dictated its movements. By the assimilated tactics our infantry are placed in good condition, the evalry decidedly damaged. It remains to be seen with what success the board has treated the artillery arm. As for the caralry, if the tactics pure and simple were left, and a separate book, carefully prepared, on Equitation and Swordsmanship, the prosent inadequate substitute, with the whole "School of the Soldier Mounted," being cut out bodily, it would be all the better for the service in the future, when our horse. ed regiment a practical impossibility. troops to depend on their fire is a question men may yet meet real cavalry in battle, excep for officers gifted with the lungs of that has been repeatedly decided in the Then it will be too late to change.