

ARMY APPROPRIATIONS.

[To accompany bill H. R. No. 562.]

FEBRUARY 9, 1855.—Laid upon the table, and ordered to be printed.

Mr. PHELPS, from the Committee of Ways and Means, made the following

REPORT.

The Committee of Ways and Means, to whom were referred the amendments of the Senate of the United States to House bill No. 562, "making appropriations for the support of the army for the year ending the thirtieth of June, one thousand eight hundred and fifty-six," beg leave to report :

They recommend that the House of Representatives do agree to the first, second, seventh, eighth, ninth, tenth, eleventh, twelfth, fifteenth, sixteenth, eighteenth, and twenty-third amendments of the Senate. That they do agree to the fifth amendment of the Senate with an amendment—strike out the whole of the amendment of the Senate, and insert in lieu thereof as follows: For repairs, preservation, and contingencies of arsenals, fifty thousand dollars, and for continuing the construction of the arsenal at Benicia, California, forty thousand dollars. *And it is hereby provided,* That the annual compensation of the civil superintendents of the national armories be two thousand dollars, without perquisites, allowances, or additions of any kind, and that the same be paid out of the appropriation for the national armories. That they do agree to the twenty-first amendment of the Senate, with an amendment—strike out the whole of the amendment of the Senate, and insert in lieu thereof as follows:

SEC. *And be it further enacted,* That the President, for the purpose of maintaining peace with the Indian tribes, of protecting the citizens on the routes of emigration in the Territories of the United States, and the citizens inhabiting said Territories, and to suppress Indian hostilities in the same, be, and he is hereby, authorized to call for and accept the services of any number of mounted volunteers not exceeding in all three thousand, officers and men, to be organized as hereinafter directed, who shall, as circumstances may direct, be employed as rangers, scouts, and spies, and serve for twelve months, unless sooner discharged: *Provided,* That the number of privates for each company of volunteers herein authorized shall not exceed sixty-four: *And provided further,* That the said volunteers may be required to serve on foot, if circumstances should render such service necessary.

SEC. *And be it further enacted,* That the said volunteers shall furnish their own horses and horse equipments, and when mustered into the service shall be armed at the expense of the United States; and, until discharged therefrom, shall be subject to the rules and articles of war, and shall in all respects, not set forth in the provisions and limitations of this act, be organized in the same manner with the present regiment of mounted riflemen of the United States army.

SEC. *And be it further enacted,* That the said volunteers so offering their services may be accepted by the President in companies, squadrons, battalions or regiments—whose officers shall be appointed in the same manner prescribed by law in the several States and Territories to which said companies and squadrons shall belong.

SEC. *And be it further enacted,* That the volunteers who may be received into the service of the United States by virtue of this act, and who may be wounded or otherwise disabled in the service, shall be entitled to all the benefits which may be conferred by existing laws on other persons wounded or disabled in the service of the United States.

SEC. *And be it further enacted,* That the pay of the said volunteers, including compensation for the use and risk of horses not killed in action, shall be as follows: For officers of all grades, the pay and emoluments of the like grade in the present corps of mounted riflemen of the United States army; for sergeants, one dollar and twenty cents per day; for corporals, blacksmiths, farriers, and musicians, one dollar and ten cents per day, and for privates one dollar per day: *Provided, however,* That if any mounted volunteer, other than a commissioned officer, shall not keep himself provided with a serviceable horse and with serviceable horse equipments, the said volunteer shall serve on foot and shall forfeit one-half his daily pay during the period of such service dismounted. *And provided, further,* That the pay herein allowed shall be in lieu of all pay allowances and bounties now authorized by law, except rations, clothing, and commutation in money of clothing, and excepting all such claims as may be valid under existing laws for wounds or disability incurred in service, or for horses killed in action. *Provided, further,* That the Quartermaster's department may furnish the volunteer with horse equipments at the cost of the same to the government.

SEC. *And be it further enacted,* That the President be, and he is hereby, authorized to prescribe and to vary from time to time, as may be in his judgment expedient, the arms and equipments of the volunteers authorized to be accepted, or any portion thereof.

That they do agree to the twenty-second amendment of the Senate, with the exception of the sum of money therein appropriated, the committee having called for estimates of the amount needed to defray the expenses of the volunteer force; and when that is furnished, propose to insert the proper sum.

That they do not concur in the third, fourth, sixth, thirteenth, fourteenth, seventeenth, nineteenth, and twentieth amendments of the Senate.

WAR DEPARTMENT,
Washington, January 8, 1855.

SIR: I have the honor to transmit herewith, for the consideration of the Committee on Military Affairs, a communication from the Colonel of Ordnance, submitting an estimate of funds required for repairs, improvements, and new machinery at the national armories for the next fiscal year.

Approving the estimate, I recommend that the amount (\$74,000) may be provided in the army bill now pending in the Senate.

Very respectfully, your obedient servant,
 JEFF'N DAVIS,
Secretary of War.

Hon. JAMES SHIELDS,
Chairman of Committee on Military Affairs, Senate.

Estimate of funds required for the national armories for the fiscal year ending June 30, 1856, in addition to the amount for that year heretofore estimated for Harper's Ferry armory.

1. For repairs and improvements and new machinery at Springfield armory.....	\$54,000
2. For new machinery at Harper's Ferry armory	20,000
	74,000
Total.....	74,000

Remarks in explanation of the foregoing estimate.

The repairs and improvements at Springfield armory contemplate the rebuilding of the rolling-mill and forge, and to remove the rolling and forging operations now carried on in a very old and unsafe building at the lower water-shop, about a mile from the upper shop, to the middle-privilege, which is within one hundred rods of the latter. The present rolling-mill and forge cannot be used much longer, and an absolute abandonment of these branches will be forced, if an outlay is not soon made for these purposes.

The estimate for new machinery, at both armories, is for the purpose of making new machines, and the necessary alterations to those now on hand, to adapt them to work on the new-model rifle-musket with the Maynard primer. The appropriation is necessary to enable the national armories to change work to the improved model of rifled small-arms. The accompanying schedule states in detail the machines, &c., which are required. Of the whole amount, (viz: \$27,000,) \$7,000 are included in the previous estimate for Harper's Ferry armory, leaving only \$20,000 additional for that armory.

H. K. CRAIG,
Colonel of Ordnance.

ORDNANCE OFFICE,
January 3, 1855.

Schedule of machinery, &c., required at each of the United States armories.

2 model muskets (Maynard primer).....	\$700 00
2 sets verifying-gauges for the same.....	1,500 00
New tools, machine-fixtures, and altering machinery	7,500 00
1 machine for facing and rough-dressing stocks.....	1,200 00
1 machine for first-turning stocks.....	1,300 00
1 machine for cutting bearings on stocks.....	800 00
1 machine for milling ends of barrels.....	500 00
1 machine for cutting out magazine for lock-plate.....	900 00
1 machine for turning bands.....	1,200 00
1 machine for lever punching-press.....	1,000 00
1 set machines for wood-screws.....	2,500 00
2 machines for grooving bayonet sockets and clasps.....	450 00
2 swedge-drops for forging components.....	1,000 00
1 tilt-hammer for miscellaneous work.....	450 00
6 machines for rifling barrels.....	6,000 00
	27,000 00

WAR DEPARTMENT,

Washington, March 9, 1854.

SIR: The act of August 23, 1842, "respecting the organization of the army," &c., section 6; allows "double rations to the commandants of each permanent or fixed post *garrisoned with troops.*" By the army appropriation act of September 28, 1850, (9 Stat. 504, item "Subsistence of officers,") this allowance is extended to *ordnance* officers commanding arsenals and armories, and to *engineer* officers commanding fixed or permanent posts. There is one permanent post neither garrisoned with troops nor commanded by an ordnance or engineer officer, and to which, consequently, the allowance of double rations does not extend—that is, the Schuylkill arsenal, under the Quartermaster department. The commanding officer of this arsenal has responsibilities more than equal to the average of the commandants of other arsenals and fixed posts not garrisoned with troops, and I recommend that a provision be inserted in the next army appropriation act extending the allowance to him.

Very respectfully, your obedient servant,

JEFFERSON DAVIS,

Secretary of War.

Hon. JAMES SHIELDS,

Chairman of Committee on Military Affairs, Senate.

ADJUTANT GENERAL'S OFFICE,

Washington, June 7, 1848.

GENERAL: I am directed to communicate the following instructions for your guidance, as soon as you ascertain that the treaty of peace has been ratified by the Mexican government.

It has been determined to augment the regular force now in Upper California by four companies of dragoons, and to hold Santa Fe with a like amount of cavalry and one company of artillery. Accordingly, on receiving authentic intelligence of the ratification of the treaty by the Mexican Congress, you will immediately put in march the nine companies for the destinations indicated, directing those intended for California to pursue the route which will lead to the headwaters of the Gila, being the one followed by Major Cooke, and believed to be the best.

Should the three dragoon companies (1st regiment) under Major Beall, serving with General Price's column, be still at Chihuahua, they, with one company (A or E) of the same regiment, must be sent to Monterey, Upper California. But should these companies have left Chihuahua for Santa Fe, and proceeded beyond striking distance, these companies, A and E, 1st dragoons, and two of the companies of the 2d regiment, attached to your column, will be ordered to the Pacific; and in this contingency the force to garrison Santa Fe will consist of the remaining company of the 2d dragoons, and one company of the 3d artillery, to be drawn from the "army of occupation," and the three dragoon companies (1st regiment) serving under Brigadier General Price. Brevet Lieutenant Colonel Washington, 3d artillery, who is hereby assigned to duty according to his brevet rank, will command the troops for Santa Fe, and on his arrival will act as governor of New Mexico until further orders.

* * * * *

I am, General, very respectfully, your obedient servant,
R. JONES, *Adjutant General.*

Bvt. Maj. General J. E. WOOL:
Commanding Army of Occupation, Monterey, Mexico.

ADJUTANT GENERAL'S OFFICE,
Washington, June 27, 1854.

Official extract.

SETH WILLIAMS, *A. A. General.*

[Extract.]

[Orders No. 165.] HEADQUARTERS ARMY OF OCCUPATION,
Marine, Mexico, June 27, 1848.

Company "C," 3d artillery, two companies, "A" "E," 1st dragoons, and the three companies of the 2d dragoons, attached to the army of occupation, will hold themselves in readiness, under the directions of Lieut. Colonel Washington, to take up their line of march for New Mexico and California at the shortest notice.

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By command of Major General Wool:
C. J. HELM, *A. A. A. General.*

Official: O. F. WINSHIP, *A. A. General.*

ADJUTANT GENERAL'S OFFICE,
Washington, June 27, 1854.

Official extract.

SETH WILLIAMS, *A. A. General.*

WASHINGTON, *January 8, 1855.*

DEAR SIR: In the names, and with the consent, of two members of the Military Committee of the House of Representatives, (Messrs. Bissell and Faulkner,) I have the honor to present the enclosed amendment for the army appropriation bill, which it was the intention of those gentlemen to have offered upon the passage of the bill through the House of Representatives, which happened unexpectedly to be called and passed during the absence of both of them.

The object of the amendment is, to provide a very moderate compensation for the military services of the gallant Lieut. Colonel Washington, of the army, who was lost with the steamship *San Francisco*.

After his gallant services during the war with Mexico, during which few men were more distinguished, he was selected and appointed military commander and governor of New Mexico, by especial assignment of the War Department.

The difficult and important trust of organizing a disturbed and newly conquered country, suppressing Indian hostilities, and collecting revenue, devolved upon him.

He established order, quieted the various bands of Indians, and collected revenue to the amount of about \$8,000; all of which he has satisfactorily accounted for, reserving not a dollar as compensation.

The prolonged march to Santa Fe, the unavoidable expenses incident to the commander and governor of a Territory, devolved upon him expenditures far beyond the amount of his army pay and allowances; and he returned home several thousand dollars out of pocket.

The effect of the amendment will be, to give him the allowance prescribed by the rules laid down by General Kearney, known as the Kearney code—that is, at the rate of \$2,000 per annum from the period of his appointment and service as military commandant and governor—about a year and a few months.

With much respect, your obedient servant,

R. B. LEE.

HON. JAMES SHIELDS, *Senator, &c.*

WAR DEPARTMENT,

Washington, January 10, 1855.

SIR: In conformity to an act passed at the last session of Congress, civil superintendents of the national armories have been appointed, and I have the honor to recommend that a provision be introduced into the army appropriation bill, allowing them a compensation equal to the pay and computed allowances of a major of ordnance, to be paid from the appropriation "for the national armories." The grade to which it is recommended that their compensation be assimilated is that of the ordnance officers recently in charge of the armories.

Very respectfully, your obedient servant,

JEFF'N DAVIS,

Secretary of War.

HON. R. M. T. HUNTER,

Chairman Committee on Finance, Senate.

WAR DEPARTMENT,
Washington, January 24, 1855.

SIR: I have the honor to transmit herewith a communication from the colonel of ordnance recommending an increase of the salaries of certain officers of his department at the national armories and arsenals, and concur therein only so far as regards the principal clerk at each of the armories, whose salaries I recommend to be raised to \$1,200 per annum.

Very respectfully, your obedient servant,
JEFF'N DAVIS,
Secretary of War.

Hon. R. M. T. HUNTER,
Chairman Committee on Finance, Senate.

ORDNANCE OFFICE,
Washington, January 13, 1855.

SIR: In the belief that the compensation allowed by law to the military storekeepers, master-armorer, and clerks, at the national armories, is at this time insufficient, in consequence of an advance in the cost of living; and as an increase of wages and salaries has been the consequence of such advance in regard to many other employes of the government, I would recommend an increase in the compensation for the above-named officers.

The compensation of each of these armory officers is prescribed by the act of 23d August, 1842, as follows: For the paymaster—who is also storekeeper—\$1,250 per annum; for the master-armorer, \$1,200 per annum; and for the clerks, \$800 per annum, each. I regard these rates as an inadequate compensation for the services and responsibilities attached to the respective offices. The paymaster and storekeeper receives, disburses, and accounts for all the money which is expended for public purposes at the armory. He is also accountable for all the finished arms and material for their fabrication, and for all other public property not in use in the workshops. For the proper performance of his duties, and a faithful accountability for the public money and property intrusted to his charge, he is required to furnish good and sufficient bond to the amount of \$50,000. The average disbursements of the paymaster and storekeeper, at each armory, for the last five years, have been about \$223,000 per annum, and the value of the public property, at the two armories, for which these officers are accountable, is about three and a half million of dollars.

The master-armorer has the general charge and supervision of all the workshops, and keeps accounts, with the foremen, for all tools and materials, rough and finished work, delivered to and received from them respectively. He is also the chief inspector of all materials and tools, and of all finished arms to be delivered into the public storehouse, and is responsible that they shall have undergone the prescribed proofs, and are complete for service.

The duties of the clerks at the armories include correspondence, the keeping of time-rolls, the preparation of pay-rolls, and of accounts

and returns of money and property; accounts of all materials issued for fabrication, and of the disposal made of them, and the copying and recording of all public letters, papers, and returns. These duties require the employment of three permanent clerks at each armory.

The foregoing is a general statement of the duties and responsibilities, at the armories, of the officers referred to in this letter. To understand their character and amount, and thus to form a proper appreciation of their value, it is necessary to know all the details of the system of management and accountability at the armories. From my knowledge and experience in this respect, I can confidently recommend the following as a fair compensation in each case, viz: For the paymaster and storekeeper and for the master-armorer, at each armory, a salary of \$1,500 per annum; for the principal clerk \$1,200, and for each of the other clerks at the armories \$1,000 per annum; the respective clerks to be designated by the Secretary of War.

The proposed salaries add about 25 per cent. to those now received by the paymasters and master-armorers, and from 50 to 25 per cent., according to the character of their duties, to those now received by the clerks.

In this connexion, it seems proper that I should also refer to the inadequacy of the compensation of the paymasters and storekeepers at the arsenals. Their salaries were fixed by the same act—that of 23d August, 1842—at \$1,250 per annum for those at arsenals of construction, and \$800 per annum for those at other arsenals. They are underpaid, considering the extent and character of their responsibilities and duties, and an increase of about 25 per cent. would not give them more than a fair compensation.

I therefore recommend that the military storekeepers, whose salaries are now \$1,250, shall be allowed hereafter \$1,500; and those whose salaries are \$800, shall be allowed \$1,000 per annum.

Very respectfully, your obedient servant,

H. K. CRAIG,
Colonel of Ordnance.

Hon. JEFFERSON DAVIS,
Secretary of War.

WAR DEPARTMENT,
Washington, January 29, 1855.

SIR: I have the honor to transmit herewith, for the consideration of the Committee on Finance, a letter from the chief of the topographical engineers, submitting an estimate of the amount required to pay arrearages for allowances for fuel, quarters, transportation, and per diem to officers of his corps, for which there is no appropriation available, to the 31st ultimo; also an estimate of the amount which will be due for the same objects on the 30th June next, and one for the fiscal year ending the 30th June, 1856. I recommend that the army

bill may be amended so as to provide for the objects stated, up to the 30th June, 1855.

Very respectfully, your obedient servant,

JEFFN. DAVIS,

Secretary of War.

Hon. R. M. T. HUNTER,

Chairman Committee on Finance, Senate.

BUREAU OF TOPOGRAPHICAL ENGINEERS,

Washington, January 25, 1855.

SIR: In accordance with the endorsement upon my letter of the 7th December last, presenting a statement of the cases in which the payment of allowances for fuel, quarters, &c., have been refused by the Quartermaster's department, I transmit herewith an estimate to cover the arrears for allowances to officers for which there is no appropriation available, showing the amounts due on the 31st December, 1854, and the amounts which will probably be due on the 30th June next. Also an estimate of the amount which will probably be required for the payment of similar allowances during the fiscal year ending 30th June, 1856.

Respectfully, sir, your obedient servant,

J. J. ABERT,

Colonel Corps Topographical Engineers.

Hon. JEFFERSON DAVIS,

Secretary of War.

Estimate of amount required to cover arrearages for allowances of fuel, quarters, transportation, and per diem to officers, for which there is no appropriation available.

To whom due.	Amount due December 31, 1854.					Additional amount which will probably be due June 30, 1855.				
	For fuel.	For quarters.	For transportation.	For per diem as member of the board of engineers.	Total.	For fuel.	For quarters.	For transportation.	For per diem as member of the board of engineers.	Total.
Lieut. Col. James Kearney.....				\$866 00	\$866 00				\$362 00	\$1,228 00
Lieut. Col. S. H. Long	\$121 64	\$288 00	\$71 00	550 00	1,030 64	\$100 64	\$192 00		362 00	1,685 28
Major H. Bache.....				934 00					362 00	1,296 00
Lieut. M. L. Smith	42 24	48 00			90 24	63 32	96 00			249 56
Lieut. G. H. Derby.....	75 33	240 00			315 33					315 33
Lieut. Frs. T. Bryan.....	42 24	48 00			90 24	63 32	96 00			249 56
Estate of Capt. A. Canfield.....	109 30	280 80			390 10					390 10
Total.....	390 75	904 80	71 00	2,350 00	3,716 55	227 28	384 00		1,086 00	5,413 83

ARMY APPROPRIATIONS.

BUREAU OF TOPOGRAPHICAL ENGINEERS, January 25, 1855.

J. J. ABERT, Colonel Corps Topographical Engineers.

Estimate of funds that will probably be required during the fiscal year ending 30th June, 1856, for the payment of commutation of transportation of baggage, and of quarters and fuel of officers, in cases not provided for by the Quartermaster's department, and for allowances to meet extra expenses under the special direction of the Secretary of War.

For fuel and quarters.....	\$2,500
For transportation.....	1,500
For allowances to meet extra expenses under the special direction of the Secretary of War.....	2,500
Total.....	<u>6,500</u>

J. J. ABERT,

Colonel Corps Topographical Engineers.

BUREAU OF TOPOGRAPHICAL ENGINEERS,

January 25, 1855.

WAR DEPARTMENT,

Washington, January 10, 1855.

SIR: I have the honor to recommend that an appropriation of thirty thousand dollars be made in the army appropriation bill, now pending in the Senate, "for printing a new system of light infantry and rifle tactics, to be stereotyped, with engraved plates, and for procuring, for distribution to the militia of the United States, books of tactical instruction, including the system of regulations now in course of preparation."

With regard to the first of these objects, I have to refer the committee to the report herewith transmitted, of the board of officers by which the system of light infantry and rifle tactics was prepared and adapted to our service, and to the enclosed copies of communications from other experienced officers, respecting the value of the system.

The distribution of works of tactical instruction to the militia has been heretofore recommended in the annual reports from this department and the commanding general, and I deem it unnecessary to repeat the considerations therein set forth as to the propriety of this measure.

Very respectfully, your obedient servant,

JEFF'N DAVIS,

Secretary of War.

Hon. R. M. T. HUNTER,

Chairman of Committee on Finance, Senate.

Proceedings of a board of officers convened at West Point, New York, by virtue of the following order, viz :

[Special Orders No. 131.]

WAR DEPARTMENT,

Adjutant General's Office, Washington, August 2, 1854.

A board of officers will assemble at West Point, New York, on the 15th instant, or as soon thereafter as practicable, to examine and report upon a system of rifle and light infantry tactics, prepared by Brevet Lieutenant Colonel W. J. Hardee, captain 2d dragoons, under the instructions of the War Department.

DETAIL FOR THE BOARD.

Brevet Lieutenant Colonel W. H. T. Walker, captain 6th infantry.

Brevet Major R. S. Garnett, captain 7th infantry.

Brevet Major S. C. Ridgely, captain 4th artillery.

Brevet Lieutenant Colonel Hardee will repair to West Point, and remain there during the session of the board, in order to furnish such information in relation to the system as may, from time to time, be called for by the board.

By order of the Secretary of War :

S. COOPER,

Adjutant General.

[Special Orders No. 136.]

WAR DEPARTMENT,

Adjutant General's Office, Washington, August 9, 1854.

Brevet Lieutenant Colonel W. H. T. Walker, captain 6th infantry, and Brevet Major R. S. Garnett, captain 7th infantry, are relieved from the operation of special orders No. 131, of August 2, 1854; and Brevet Lieutenant Colonel Silas Casey, captain 2d infantry, and First Lieutenant J. M. Jones, 7th infantry, are detailed as members of the board instituted by that order.

By order of the Secretary of War :

S. COOPER,

Adjutant General.

[Special Orders No. 178.]

WAR DEPARTMENT,

Adjutant General's Office, Washington, November 6, 1854.

The board of officers instituted by "special orders" Nos. 131 and 136, of August 2 and 9, 1854, will assemble in this city on the 13th instant, or as soon thereafter as practicable, for the transaction of such business as may be brought before it.

By order of the Secretary of War :

S. COOPER,

Adjutant General.

WASHINGTON, December 13, 1854.

The board of officers instituted by special orders Nos. 131 and 136, dated 2d and 9th of August, 1854, and afterwards reassembled at Washington by special orders No. 178, dated November 6, 1854, to act upon certain instructions from the War Department, having finished the duty assigned it, respectfully submit the following report:

In pursuance of instructions, Lieutenant Colonel Hardee, of the 2d dragoons, appeared before the board, and presented a system of tactics for light infantry, riflemen, and skirmishers, prepared by him in great measure from the French drill for the *chasseurs a pied*.

The board caused the work to be read to them, and investigated and studied its general character and merits.

The board then entered upon a more minute and thorough examination, passing carefully over, and deciding upon, every motion, command, and movement, in the several schools, which constitute the entire work.

This consideration of the theory was frequently laid aside, while the board witnessed the practical illustration of the system; and all doubtful points were tested by their execution on the field.

The Superintendent of the Military Academy, having directed the corps of cadets, and the company of sappers and miners, to be instructed in this drill, afforded the board an opportunity to see, not only the details, but also the general character and features of the entire system.

The board will endeavor to present concisely a view of this system and its general harmony with the existing drill for heavy infantry.

A battalion instructed in this system can perform all the movements embraced in our present drill for heavy infantry, and, with two exceptions, in the same manner.

1. The slowest time for manœuvring a light battalion is one hundred and ten paces in a minute.

2. Whenever a sub-division faces by a flank, it forms a depth of four, retaining the interval made by the file which stepped up to form that depth.

This latter is an admirable device to facilitate the movements of the sub-division, when in double quick time or a run.

A battalion instructed in this system can take its place in a line of battle composed of heavy infantry, and perform all the movements required in the evolutions of the line, as prescribed by our present system.

In fact, should the movement be a change of front, with light battalions on the flanks, it would, by their quickened pace, be facilitated.

Besides the method of manœuvring which this system has, in common with the drill for heavy infantry, it has methods peculiar to itself, and which constitute its strength and power.

They consist in moving the line or column formed in quick or double quick time without halting, in the following movements:

1. Deployment of columns.
2. Execution of successive formations.
3. Formation of column to the right or left into line.
4. The various ployments from line into column.

5. Closing in mass, or to half distance, and retaking wheeling distance.

The differences of method thus far pointed out, involve no difference of principle in the two systems.

It is the same principle, with the slight modifications required by continuing the march without halting, and the accelerated pace incident to light infantry movements.

The following new and useful movements are embraced in this system :

1. The formation in four ranks of sub-divisions, with a view to a square.

2. The constitution of a reserve for a square composed of a single battalion.

3. Marching a square by either front without breaking.

The system under examination differs from the drill of heavy infantry but in two points, which are radical, or where principle is involved.

1. The habitual formation is in two ranks, with the power to increase, when desirable, the depth to four, rapidly and without confusion, either when marching or when at a halt.

2. The change in the manner of obliquing. It is theoretically correct, and believed to be, in practice, a great improvement. It consists in obtaining the new direction by a half-face, moving forward until the requisite degree of obliquity is gained, and then resuming the original direction.

On a comparison with the light infantry and rifle tactics of 1825, it is the opinion of the board that this drill is decidedly superior, and principally for the following reasons :

1st. The formations into line by the old system were chiefly by flank movements, methods generally to be deprecated in presence of an enemy.

2d. The prompt formations being made on either the flank or centre file of a sub-division, render necessary the resort to an uncadenced step in coming into line, which tends (the position of the files at the same time being much disjointed) to produce confusion, and is to be avoided on the field of battle.

The drill for skirmishers, as laid down in this system, presents some striking advantages.

In that drill, but one-half of the company habitually skirmish at the same time, the other half being in reserve.

In extending as skirmishers, which is done in groups of four men, (called comrades in battle,) it is the groups which first take the intervals, and between the limits of twenty and forty paces. After attaining the interval required, the men of each group deploy at distances from each other of never more than five paces.

When rallying to resist scattered cavalry, it is the group of four comrades which forms square and protects itself by its fire and by the bayonet.

The group in square forms also the nucleus of rally to the section or platoon in forming circle, to resist a more serious attack of cavalry.

This method of acting in groups is a very great improvement; it

prevents that individual isolation, which is to be avoided, when skirmishing with the enemy.

Many of the commands have been altered, making them shorter, without, however, impairing their significance.

A few movements have been added to facilitate the advance in line, and the better to adapt the system to the features of our country and the nature of our warfare; and also a few in order that the battalion may be instructed in all the movements embodied in the evolutions of the line.

In conclusion, the board is of opinion that this is a most excellent system of tactics for light infantry, riflemen, and skirmishers.

A body of men equal to its full requirements would be of great power and efficiency in a line of battle.

The board is also of opinion that this system might be most advantageously employed in the contests which so frequently occur with the Indian tribes on our frontier.

For volunteer corps, composed of men of intelligence and physical efficiency, this system is superior to any other known to the board.

From the nature of our country and the character of our people, it is peculiarly expedient to substitute for immobility in the ranks and machine-like movements, intelligence, rapidity of motion, and accuracy of fire.

Its adoption is recommended for light infantry and rifle corps, both regular and volunteer.

The board is further of opinion that the drill for skirmishers which it prescribes should be adopted for all troops serving on foot.

SILAS CASEY,

Brevet Lieutenant Colonel United States Army.

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