

U. S. S. Wolverine, South Manitou Island, August 11, 1906.

Sir: I have the honor to make the following report on the inspection of the U. S. S. Gopher, which took place on August 11, 1906.

The board of inspection consisted of: Commander Henry Morrell, U. S. Navy; Surgeon Alfred Grunwell, U. S. Navy; Lieutenant D. P. Mannix, U. S. Navy; Ensign Joseph L. Hileman, U. S. Navy; Ensign Charles E. Smith, U. S. Navy.

The inspection included a general inspection of the ship with crew at quarters, general quarters, fire drill, collision drill and abandon ship.

The condition of the ship was excellent in all departments, showing a careful attention to details on the part of the commanding officer, Commander Eaton, and the executive officer, Lieutenant Williamson.

There is no anchor engine; some boards were stowed in the fire room bilges.

The inspection of the crew showed a number of the men without tape on their cuffs, and without watchmarks; in the naval reserve it is a difficult matter to have proper watchmarks as men are frequently shifted from one watch to another. A number of the uniforms are of very inferior material. The majority of the crew had only one white hat. Generally, the appearance of the crew was very good, indeed.

In reporting their divisions the officers marched aft at the sounding of officers' call and reported simultaneously to the executive officer as company petty officers do on dress parade, a much smarter method than usually used on board ship.

Call to general quarters was sounded at 3:58, all divisions reporting by 4:01; very efficiently executed. Every precaution possible was done and the gun crews were very well acquainted with their various duties. Loading drill was gone through with and firing pins shifted, all of which was very creditably performed. After this the gun captains and divisional officers were gathered around one of the guns and an attempt was made to give them some idea of the systems of fire control and spotting now in general use.

The fire bell was sounded at 4:24:45; fire forward; all divisions reported by 4:25:30; three streams; very efficiently executed; all hatches and skylights were covered and every man had his station; all ports and other openings below were covered by men detailed for that duty; secure was sounded at 4:27; all divisions were reported by 4:35.

Call was sounded to abandon ship at 4:35:40; all boats were clear by 4:38; excellent. The engineers' force was generally left on board, also some sick bay men. The Gopher's boats are the best kept in the fleet. It was noted that the boat recalls were painted on the backboard instead of the body of the boat itself; this is hardly a fault, as the majority of the ships had no recalls in their boats what-ever.

The board was impressed by the spirit shown by Commander Eaton, who stated that any errors or omissions were due to ignorance and not design. It is the opinion of the board that the omissions were not due so much to ignorance as to meager equipment. It is a great pleasure to see any military organization give such an exhibition of discipline, rapidity, zeal and a desire to learn as did the commanding officer, the officers and the crew of the Gopher.

Very respectfully,

H. MORRELL,
Commander U. S. Navy.

The Secretary of the Navy.

U. S. S. Wolverine, Harbor Springs, Mich., August 15, 1906.

Sir: I have the honor to make the following report of the maneuvers recently held with the naval militia on the Great Lakes, in obedience to the department's order, No. 3468-179, of May 24, 1906.

Copies of this order were forwarded to the commanding officers of the naval reserve ships to acquaint them with the intentions of the department.

A series of memoranda, ten in number, were prepared and forwarded to the commanding officers; these memoranda, which are appended to this report, covered as fully as possible the work to be gone into.

As none of the reserve officers had tactical signal books, a typewritten copy of the signals it was intended to use was also forwarded (No. 8).

On July 30, 1906, the following officers of the Atlantic fleet reported on board for duty during the maneuvers: Lieutenant Mannix, of the Colorado; Ensign Hileman, of the Pennsylvania; and Ensign Smith, of the Maryland.

The Wolverine left Mackinac Island at 4:00 P. M. on August 3d, enroute for the rendezvous at South Manitou Island, Lake Michigan. After getting outside a boat was lowered and the tactical diameter determined.

The Wolverine came to anchor at South Manitou at 8:00 A. M., on August 4th, Saturday. During the afternoon buoys were laid out in accordance with the anchorage system given in memorandum No. 7. While this work was being done the commanding officer and Lieutenants Mannix and Wortman, who were to serve as advisors to the attack and the defense respectively, in the land operations of the eight, went ashore and made a reconnaissance of the ground.

During the succeeding twelve hours the following reserve ships entered the harbor and anchored in the berths previously assigned: The U. S. S. Dorothea, Captain W. F. Purdy, Chicago; the U. S. S. Gopher, Commander G. A. Eaton, Duluth; the U. S. S. Hawk, Lieutenant Commander F. R. Semen, Cleveland; the U. S. S. Yantic, Commander F. D. Standish, Detroit; the U. S. S. Essex, Lieutenant Commander A. F. Nicklett, Toledo.

The commanding officers of these vessels came on board the flag ship to pay their respects to the commander of the squadron, and consulted with the regular officers concerning the maneuvers and drills of the week; these drills are given in memorandum No. 5.

Lieutenants Page and Dean, of the Illinois naval reserves, reported on board for duty. Lieutenant Page was assigned to duty as signal officer, and Lieutenant Dean was sent to the Dorothea to act in a similar capacity.

The evening was occupied in ship visiting. The Essex did not arrive until after dark, so a whale boat with a lantern was sent to make her buoy and a steam cutter with a regular officer met her at the entrance of the harbor.

At 8:30 A. M. on the 6th the officers left the flagship for the various vessels to which they were assigned, viz.: Lieutenant Mannix to the Essex; Lieutenant Wertman to the Gopher; Ensign Hileman to the Yantic; Ensign Smith to the Hawk; there was, unfortunately, no officer available to send to the Dorothea.

The drill for the forenoon was boats under oars, followed by signals. Each ship drilled its own boats by signals hoisted on board, the boat book being used; this method gave the signal force on board exercise as well as the boat crews.

This was an excellent opportunity to suggest various tricks in signalling; thus, where possible, clip hooks and good toggles were fitted to the flags, and boards were rigged up with rows of hooks, the flag numbers being plainly marked above the hooks. Some of the ships had bad leads for their signal halliards; others had but one set; all this was corrected as far as possible.

The boat drill itself was very creditable, the pulling was fair, and the maneuvers showing that the officers had studied the boat book. The worst features were the uniforms of the crews and the evident fact (on at least one of the ships) that the crews were picked up around the decks just before the drill. A number of the boats had no answering pennants and used wig-wag flags instead.

The general recall was hoisted at 10:00 A. M., and the signal drill begun. This drill was conducted from the flagship by the executive officer, Lieutenant Overstreet, who acted as flag lieutenant during the maneuvers. The drill included the use of the tactical signal book, boat signals, and international signals. While the signal force of the various ships had practically no training in any but the international signals, and very little training in these, they showed such zeal and willingness that rapid progress was made. The flagship required all signals to be repeated and at the close of the drill the meaning of the signal sent was wig-wagged back by each ship in succession. The two-arm semaphore was not used as none of the reserve signal men were familiar with it.

At 1:00 P. M. the ships of the squadron got under way independently and stood out of the harbor for maneuvers in the school of the section. The sections were: (1) Wolverine and Dorothea; (2) Gopher and Hawk; (3) Essex and Yantic. The first ship in each section acted as flagship, the regular officer on board acting as flag officer.

The ships drilled from 1:00 until 5:00 P. M., every maneuver in memorandum No. 8 being executed other than those of anchoring and getting under way; all tactical signals were repeated; distance, 400 yards; speed, from 7 to 8 knots.

At 3:00 P. M. the order of vessels was changed, the following sections being formed: (1) Wolverine and Hawk; (2) Gopher and Yantic; (3) Essex and Dorothea.

An incident in the work of the third section shows the zeal and interest shown by the reserve officers in their work: About 5:00 P. M. the Essex hoisted 173, "well done," in recognition of the excellent work of the Dorothea during the afternoon. This signal was evidently taken by the Dorothea for 183, "man overboard"; the life buoy was immediately dropped, the life boat lowered, the buoy picked up, and in a very short time the boat was back to the ship and hoisted.

At 5:00 P. M. the ships which had not previously ascertained their tactical diameter proceeded to do so by the method given in memorandum No. 4.

The tactical diameters thus found are given in memorandum No. 6. The Essex was found to have the largest turning circle and 490 yards was adopted as the turning circle of the fleet, the smaller vessels using about half helm.

The last vessel of the squadron to enter the harbor anchored at 7:00 P. M.

The evening was occupied with signal drill, the Very and torch signals being used. This drill was conducted by Lieutenant Overstreet from the flagship, a message being sent by the Very system and the meaning sent back by the ships in succession to the flagship by means of torch signals. When this drill was completed, the regular officers, who had gone on board the ships to which they were assigned, gave a talk on signals and the signal book.

On Tuesday, the 7th, the forenoon was occupied by fleet boat drills under sails and oars; the boats of each ship formed on the starboard beam and then proceeded to the flagship where they formed in line of columns on the starboard beam. All the boats of the squadron participated in the drill under oars; in the drill under sail the boats of the Essex did not take part, their sails not having been bent.

It was noted that all boats had their numbers in the bow whereas the day before several had none; the drill was conducted from the flag ship and lasted the entire forenoon.

The afternoon was occupied in maneuvering in the school of the division, the first division comprising the Wolverine, the Hawk and the Yantic, and the second division the Essex, the Gopher and the Dorothea. The divisions got under way independently and when clear of the harbor proceeded to maneuver, the commanding officer of the Wolverine directing the operations of the first division and the regular officer assigned to duty on board the Essex directing those of the second.

The maneuvers executed were the same as those of the first day, three ships participating instead of two; there being only two stadimeters in the squadron, position was kept by means of sextant angles. Some of the commanding officers did not know how to keep on the proper line of bearing when changes of front were made, but signals from the flagships were made whenever they did not have the proper bearing, so that as the drill progressed they became more and more expert, until "ships right half turn from line" presented as creditable an alignment as "line" itself.

At 3:00 P. M., the second division joined the first, having previously requested permission to do so by signal, and the entire force of six vessels maneuvered for the remainder of the afternoon in a single squadron under the commanding officer of the Wolverine.

Signal for "man overboard" was hoisted at 3:04, the squadron being in line; the signal of execution was to be the starting of the flags from the peak; all ships dropped their life buoys, stopped, backed, and lowered life boats. The Gopher executed this in a particularly creditable manner, receiving a signal of "well done" from the flagship. On several of the ships the life boat crews were standing by the entire forenoon, waiting for the signal.

	The Time was—		
	Boat in Water.	Picked up Buoy.	Hoisted Boat.
Hawk	26 s.	1 m. 50 s.	4 m.
Gopher	37 s.	1 m. 47 s.	3 m. 40 s.
Dorothea	1 m. 30 s.	5 m. 05 s.	11 m.
Yantic	47 s.	2 m.	6 m. 20 s.
Essex	2 m. 30 s.	3 m.	6 m.
Wolverine	20 s.	1 m. 35 s.	5 m. 13 s.

At 6:00 P. M. the squadron steamed into the harbor in column and anchored independently.

The evening was occupied with a signal drill, conducted from the Yantic, which vessel has both search light and ardois; this was conducted in the same manner as that of the previous night, the vessel of the squadron sending back the signal by torch in succession to the flagship.

It had been intended to give a talk on target practice and gunnery instruction that night, but as plans for the shore operations of the next day had not been completed, the regular officers assigned to duty with the landing forces consulted with the officers that were to command them.

At 6:30 A. M., on the 8th, the "defense" landed; it consisted of men from the Yantic and the Gopher, commanded by Commander Standish of the Yantic; Lieutenant Wortman, of the navy, accompanied the defense in an advisory capacity.

The orders of the defense were to construct hasty intrenchments and expect to be attacked about 9:00 A. M.

The attacking party included men from the Wolverine, Dorothea, Essex and Hawk, commanded by Captain Purdy; Lieutenant Mannix, of the navy, went with the attack in an advisory capacity.

The men from the Hawk were to encircle the enemy's left flank. Ensign Smith, of the navy, went with them.

Two thousand rounds of blank ammunition were distributed equally between attack and defense.

At 9:00 A. M. the boats of the attack formed in two parallel columns, towed by the steamers of the Wolverine. All that could be seen of the enemy were signal men and a line of skirmishers about one hundred yards inland. The beach was subjected to a heavy cross fire from three one-pounders, which was replied to by rifle fire from the enemy. At a whistle signal from the launch the boats of the left column executed right front into line and pulled at full speed for the beach; the boats of the right column then executed left front into line, thus forming a second line. As soon as the boats of the first line grounded the men jumped out and formed a skirmish line, driving back the enemy's outposts and capturing several of them. The boats of the second line then landed and the "Hawk" men took up their march around the left flank of the enemy, their movements being concealed by the woods.

The frontal attack gave the flankers fifteen minutes' start and then advanced in echelon, the "Essex" men on the extreme left being gradually pushed to the front under cover of houses, barns, etc., to outflank the enemy on his right.

In advancing the skirmishers had to pass over barbed wire fences, logs and rough ground, and around houses, barns, etc.

The defense, seeing their flanking party on their left, made a counter-attack in that direction, but the appearance of men of the opposing force around their right flank, necessitated the calling back of this force.

By this time the attack had closed in to within 200 yards of the enemy's intrenchments, when, for the first time, the defense opened fire with a galling; this gun had been so cleverly concealed that the sound of its firing was the first intimation to the attack that the enemy were provided with field artillery. The left flankers were in a position to direct a heavy fire on the rear of this gun and after both flanks and the frontal attack had delivered rapid fire for several minutes, bayonets were fixed and the position rushed from three directions simultaneously.

The intrenchments were found to have been cleverly constructed and a field hospital had been established in a hollow in the rear; the only thing showing

being a red cross flag flying over the tent. Various dressing stations were also to be seen. Casualties had been designated by Lieutenant Commander Duffield of the defense, and the hospital corps had applied dressing and bandages to wounds of the head, arms and legs; in a number of cases men were carried to the various dressing stations on stretchers.

The brigade was then formed into line; it consisted of two battalions. The first, the attack, being commanded by Captain Purdy, and the second, the defense, being commanded by Commander Standish.

The brigade was then formed into line and after being inspected by the board of inspection, it passed in review before the commanding officer of the Wolverine and the Adjutant General of the state of Michigan. The companies were then marched down to the landing and re-embarked.

At 1:00 P. M. the squadron got under way and went out of the harbor for maneuvers, these lasting until 5:00; all operations on this day were in the school of the squadron, all six vessels taking part; distance, 400 yards; and speed, from 7 to 8 knots. These maneuvers were an immense improvement over those of the preceding day and were most creditable in every way.

In the evening a biographic exhibition was given on board the Yantic of scenes of the navy; this was preceded by an illustrated lecture of the battle of Manila, given by Mr. Stickney.

A torpedo boat attack was also attempted, the general scheme of which is shown in the sketch. There were three attacking boats; two of these had been disguised as much as possible by covering the canopies and sides with dark cloth; the third was left in normal condition and was intended to be used as a decoy. The two attacking boats, a and b, entered the harbor from the N'd and headed for the Yantic, which vessel had her truck light burning and a second light 80 feet below it so distance could be taken by the attacking boats with a stadimeter. The first boat got within 530 yards, the second within 300 yards before being picked up. The Yantic was handicapped owing to the fact that she could not go to general headquarters or extinguish her lights as the biographic exhibition was going on on her quarter deck; her search light is on the port side of the bridge and this was an additional disadvantage.

As soon as the boats were picked up a heavy fire was opened on them with the ships' guns, after which, by previous agreement, the search lights were switched off.

The Hawk was the next vessel attacked. The decoy boat steamed in from position c and was promptly picked up and held by the search light; thereupon the two attacking boats got within 50 yards of the Hawk without being discovered.

The next ship was the Dorothea; the boats got within hailing distance of her and fired a Very star which burst to the right, whereupon the Dorothea put her search light on the spot where the star burst. A second star was then fired to the left which resulted in the search light being switched to the left. By this time the boats were so near than men on the ships could hear their crews laughing, when the search light was turned on them.

The officers of the Dorothea claimed that they saw the boats but supposed they were returning to the Wolverine after having torpedoed the Hawk. Ensign Smith, U. S. N., was with the attacking boats. The rifle and pistol matches were abandoned owing to lack of time and want of a suitable place to hold them.

The squadron got under way at 7:00 A. M. the following morning enroute for Harbor Springs. The weather was bad, there being a continuous rain until 5:00 P. M.

During the afternoon the Yantic and Essex fell behind but were always in signal distance. At 6:30 P. M. the head of the column rounded Harbor Point and slowed sufficiently to allow the rear to close up. In obedience to signal from the flagship distance was closed to 300 yards and at 6:45 P. M. the squadron anchored in succession on line of bearing NW. by $W\frac{1}{4}W$. Signal was made to the Essex and the Yantic to anchor at discretion as the presence of a yacht at anchor in the harbor necessitated the line of bearings being shifted and would have compelled these vessels to anchor to the eastward instead of the westward and would have placed them too near shore. To avoid this they formed indented column.

In the evening search light and signal drills were held from the Yantic, which vessel has a most efficient signal officer in Lieutenant E. J. Shipman.

The following day was occupied with boat races and ship inspection, the reports of which are appended hereto.

The results of the boat races were as follows:

Cutter Race.

Hawk, first; beat Wolverine two and a half lengths.
Wolverine, second; beat Yantic two lengths.
Yantic, third; beat Dorothea one and a half lengths.
Dorothea, fourth.

Gig Race.

Wolverine, first beat Dorothea five lengths.
Dorothea, second; beat Yantic four lengths.
Yantic, third.

Whale Boat Race.

Yantic, first; beat wolverine five feet.
Wolverine, second.

Dinghy Race.

Dorothea, first; beat Wolverine seven boat lengths.
Wolverine, second.

The Gopher had no boats of regulation pattern.

Owing to the absence overleave of a number of men from the Essex's racing crews that vessel did not participate.

The squadron began to disperse immediately after the inspection was completed, the last vessel to leave being the Yantic, which left the harbor at noon on the 12th.

In addition to the reports on ship inspection there is appended hereto:

(1) A copy of the blanks sent to the commanding officers before the inspection.

(2) Lists of officers and men on board each of the reserve ships.

(3) A "descriptive record" prepared by the executive officer of the Dorothea.

(4) A station billet prepared by the executive officer of the Yantic.

(5) Report of the fleet medical officer.

(6) The memoranda, ten in number, prepared before the inspection.

(7) A series of photographs taken by Lieutenant Overstreet and Lieutenant Mannix, of the ships and maneuvers, afloat and ashore.

Every regular officer that had anything to do with these maneuvers was impressed with the earnest desire of every officer and man of the state forces to learn all be possibly could during the limited time allowed.

The general smartness, zeal and rapidity of movement was most noticeable. What the lake forces are most in need of is proper equipment.

Particularly is this so in ordnance. As an example: The Yantic had mounted on board two 3-inch field pieces on improvised ship mounts. It is impossible to operate the elevating gear and keep the eye on the sight; after firing one shot it was impossible to elevate them at all.

Morris Tube could be rigged up on all these ships and the fighting efficiency of their crews thereby vastly increased. They should also be supplied with dummy ammunition for loading drills and with modern gunnery literature of which they have practically no knowledge.

Of the vessels composing the squadron the Wolverine and the Essex were the only ones not fitted with electric lights; these two vessels had to use oil lamps and candles. The Yantic, Hawk and Dorothea were fitted with search lights; the only vessels fitted with Ardois were the Yantic and Dorothea.

I earnestly recommend that all the vessels taking part in fleet maneuvers be fitted with electric lights and Ardois to permit of signaling in the event of the necessity of night maneuvers, in respect to which signals the squadron was dangerously deficient.

The difficulties encountered in steering the Essex have been noted in the special report on that vessel; she should be provided with steam steering gear or at least with a wheel on the bridge.

I acknowledge with pleasure the earnest and efficient co-operation of Lieutenant Overstreet in the preparation of memoranda of instruction to the vessels of the squadron, issued previous to the meeting at South Manitou, and for his active co-operation in making the drills a success.

My thanks are also due to Lieutenant Mannix, Surgeon Grunwell, Lieutenant Wortman, Ensign Hileman and Ensign Smith for their efficient and zealous assistance on board the vessel of the squadron to which they were detailed in carrying out the minor and signal drills of the ship, section, division and squadron.

I am further indebted to Lieutenant Overstreet and Lieutenant Mannix for the skilled manner in which the report is drawn up and illustrated.

Very respectfully,

(Signed) H. MORRELL,
Commander U. S. Navy.

The Secretary of the Navy.

APPENDIX 4

Minutes of the Twenty-Sixth Annual Convention of the Minnesota National Guard Association

Pursuant to call of the commander in chief, the twenty-sixth annual convention of the Minnesota National Guard Association was held at the Armory, St. Paul, Minn., on December 29 and 30, 1905.

The convention was called to order at 10:50 A. M. by President Lambert. On calling the roll the following officers were found to be present:

Commander-in-Chief:

John A. Johnson, governor, State Capitol, St. Paul.

Chief of Staff:

Brigadier General Fred B. Wood, Adjutant General, State Capitol, St. Paul.

Staff of Commander-in-Chief:

Surgeon general, Brigadier General Alexander J. Stone, Lowry Arcade, St. Paul.

Aid-de-camp, Colonel Charles L. West, Austin.

Aid-de-camp, Colonel Alexander Stewart, 314 Chamber of Commerce, Minneapolis.

Aid-de-camp, Colonel Carl C. Bennet, 620 Nicollet Ave., Minneapolis.

Aid-de-camp, Colonel Thomas F. McGilvray, Duluth.

Military storekeeper, Captain William H. Hatcher, State Capitol, St. Paul.

BRIGADE COMMANDER AND STAFF:

Brigade quartermaster, Captain William H. Hart, 316 Globe Building, St. Paul.

Commissary of subsistence, Captain Edmund W. Bayley, Sleepy Eye.

Ordnance officer, Captain Melvin J. Wiley.

Inspector small arms practice, Captain Orris E. Lee, Stillwater.

Assistant inspector small arms practice, First Lieutenant Arthur E. Clark, Jr., 815 Germania Life Building, St. Paul.

Aid-de-camp, Captain Milton S. Mead, 129 E. Fourth St., St. Paul.

Chaplain, Captain Ezra C. Clemans, 4801 Grand Ave., Duluth.

FIRST ARTILLERY:

Field and Staff—

Major George C. Lambert, 502 National German-American Bank Building, St. Paul.

Adjutant, Captain William J. Murphy, 122 W. Sixth St., St. Paul.

Ordnance officer, First Lieutenant Frederick L. Baker, 20 S. Second St., Minneapolis.

Assistant surgeon, First Lieutenant Edward A. Meyerding, 405 Ernst Building, St. Paul.

Company of Engineers, St. Paul—

Second lieutenant, Thomas J. O'Leary, Seven Corners.

Battery "A," St. Paul—

Captain, William L. Kelly, Jr., 402 Globe Building.

Second lieutenant, Edward H. Slater, 713 Conway St.

Battery "B," Minneapolis—

First lieutenant, George E. Leach, New York Life Building.

Second lieutenant, George W. Dulany, Jr., 104 Lumber Exchange.

FIRST INFANTRY:**Field and Staff—**

Lieutenant-colonel, Frank T. Corrison, Court House, Minneapolis.
 Major, Oscar Seebach, Red Wing.
 Major, Charles T. Spear, Prince and Pine Sts., St. Paul.
 Major, Frank B. Rowley, 416 Guaranty Building, Minneapolis.
 Regimental adjutant, Captain Edward G. Falk, 8 E. Lake St., Minneapolis.
 Commissary of subsistence, Captain William E. Steele, 1002 Guaranty Loan Building, Minneapolis.
 Battalion adjutant, First Lieutenant Harry D. Lackore, 15 S. Fifth St., Minneapolis.
 Battalion adjutant, First Lieutenant George T. Daly, 618 Pioneer Press Building, St. Paul.

Company "A," Minneapolis—**Company "B," Minneapolis—**

Captain, Erle D. Luce, Hampshire Arms.
 First Lieutenant, Percy L. McClay, 424 W. Twenty-eighth St.

Company "C," St. Paul—

Captain, John F. Snow, 275 W. Seventh St.
 First Lieutenant, George K. Sheppard, 320 Pioneer Press Building.

Company "D," St. Paul—**Company "E," St. Paul—**

Captain William C. Montgomery, 688 Ashland Ave.

SECOND INFANTRY:**Field and Staff—**

Colonel, Arthur W. Wright, Austin.
 Lieutenant-colonel, George S. Whitney, New State Capitol, St. Paul.
 Major, Nicholas Nichol森, Austin.
 Regimental adjutant, Captain Alfred C. Page, Austin.
 Quartermaster, Captain Robert J. Tweedy, Albert Lea.
 Commissary of subsistence, Captain William Milligan, Faribault.
 Judge advocate, First Lieutenant Harry L. Bullis, Blue Earth.
 Battalion adjutant, First Lieutenant Albert F. Koch, Echo.
 Battalion adjutant, First Lieutenant Ira D. Parker, Revere.
 Battalion adjutant, First Lieutenant Edward J. Bobleter, New Ulm.
 Surgeon, Major William H. Rowe, St. James.
 Assistant surgeon, Lieutenant George R. Curran, Mankato.

Company "B," Faribault—

Captain, William T. Mollison.
 First lieutenant, Arthur B. Cooling.
 Second lieutenant, Donald F. McKenzie.

Company "C," Winona—

Captain, Clarence W. Freeze.
 First lieutenant, Frank Wunderlich.

Company "D," Northfield—

Captain, William W. Kinne.

Company "E," Fairmont—

Captain, Roy A. Everett.

Company "F," Rochester—

First lieutenant, Albert Mohn, Kenyon.

Company "H," Mankato—

Captain, Harrison W. Maltby.
 First lieutenant, George P. Rodman.
 Second lieutenant, Morgan E. Bowen.

Company "I," Owatonna—

Captain, Herbert F. Luers.

THIRD INFANTRY:**Field and Staff—**

Colonel, Charles A. Van Duzee, 709 Ernst Building, St. Paul.
 Lieutenant-colonel, Charles E. Johnson, c-o. Public Examiner's office, New State Capitol, St. Paul.
 Major, Edward S. Person, Zumbrota.
 Major, Frederick E. Resche, police headquarters, Duluth.
 Major, Hubert V. Eva, Commercial Club, Duluth.
 Regimental adjutant, Captain Frank W. Matson, 710 Ernst Building, St. Paul.
 Quartermaster, Captain Winfield S. Brisbin, c-o. C., B. & Q. Ry., St. Paul.
 Battalion adjutant, First Lieutenant Carl C. Weaver, 1200 Second Ave. S., Minneapolis.
 Battalion adjutant, First Lieutenant Thomas L. Chisholm, 132 W. Michigan, Duluth.
 Assistant surgeon, Captain Asa F. Goodrich, 594 Endicott Arcade, St. Paul.
 Assistant surgeon, First Lieutenant James C. Ferguson, 178 Conrad St., St. Paul.

Company "A," Duluth—

Captain, Karl A. Franklin.

Company "B," Anoka—

Captain, Albert F. Pratt.
 First lieutenant, Arthur A. Caswell.

Company "C," Duluth—

First lieutenant, Frank D. Knowlton.
 Second lieutenant, John O. Olson.

Company "D," Zumbrota—

Captain, Frank G. Wilcox.
 First lieutenant, John R. Johnson (elect).

Company "E," St. Paul—

Second lieutenant, Stephen H. Spurr, 669 Grand Ave., St. Paul.

Company "F," Worthington—

Captain, Anton Schaefer, Rushmore.
 First lieutenant, Stelle S. Smith.
 Second lieutenant, Charles B. Ward.

Company "H," Olivia—

First lieutenant, Charles A. Heins.
 Second lieutenant, Alexander R. McCorquodale.

Company "I," Crookston—

First lieutenant, Charles A. Hitchcock.
 Second lieutenant, Fridolph E. Westerberg.

NAVAL MILITIA:**Staff—**

Asst. Engineer, Lieut. Nicholas F. Hugo, Manhattan Bldg., Duluth.

ROLL OF RETIRED OFFICERS:

General Elias D. Libbey, 695 Iglehart St., St. Paul.
 Colonel Christian Brandt, 303 Court Block, St. Paul.

The minutes of the twenty-fifth annual convention were read for information and approved.

The treasurer, Capt. Hart, presented the following report:

RECEIPTS.

1904.			
Dec. 28.	Balance in Second National Bank.....	\$40.15	
1905.			
Jan. 23.	Brigade headquarters, dues for 1904 and 1905.....	6.00	
Jan. 23.	Battery B.....	6.00	
Jan. 23.	Company G, 2.....	6.00	
Jan. 25.	Company C, 1.....	6.00	
Jan. 25.	Company B, 2.....	6.00	
Jan. 26.	Headquarters, 2.....	6.00	
Jan. 26.	Company I, 2.....	6.00	
Jan. 27.	Headquarters, 1.....	6.00	
Jan. 28.	Company H, 3.....	6.00	
Feb. 2.	Company C, 3.....	6.00	
Feb. 17.	Company D, 3.....	6.00	
Feb. 17.	Company B, 3.....	6.00	
Feb. 25.	Company E, 1.....	6.00	
Feb. 28.	Company K, 1.....	6.00	
Mar. 4.	Company A, 2.....	6.00	
Mar. 8.	Company F, 1.....	6.00	
Mar. 11.	Company B, 1.....	6.00	
Mar. 22.	Company F, 3.....	6.00	
Mar. 28.	Company of engineers.....	6.00	
Mar. 30.	Company A, 3.....	6.00	
April 7.	Company G, 3.....	6.00	
April 12.	Headquarters, 3.....	6.00	
May 3.	Company A, 1.....	6.00	
May 26.	Battery A.....	6.00	
June 3.	Company G, 1.....	6.00	
Nov. 9.	Company D, 1.....	6.00	
Nov. 30.	Company E, 2.....	6.00	
Nov. 30.	Company I, 3.....	6.00	
Dec. 1.	Headquarters, first artillery.....	6.00	
Dec. 4.	Company C, 2.....	6.00	
Dec. 5.	Company E, 3.....	6.00	
Dec. 7.	Company H, 2.....	6.00	
Dec. 8.	Company I, 1.....	6.00	
Dec. 20.	Company D, 2.....	6.00	
Dec. 26.	Company F, 2.....	6.00	
			\$250.15

EXPENSES.

1905.			
Jan. 13.	M. F. Brennan.....	\$1.50	
Jan. 25.	Brown, Treacy & Co.....	3.50	
Jan. 25.	Postage.....	2.00	
Mar. 23.	M. G. Thompson.....	10.00	
May 10.	Geo. C. Lambert, chairman executive committee.....	10.00	
May 10.	Harmon, Dow Co.....	3.50	
May 19.	Harmon, Dow Co.....	3.50	
May 19.	Harmon, Dow Co.....	7.50	
May 31.	Harmon, Dow Co.....	4.50	
Oct. 7.	Entertainment of delegates to Interstate N. G. A. convention.....	34.77	
Nov. 24.	Postage.....	2.00	
Dec. 20.	E. H. Season.....	4.90	
Dec. 20.	Postage, executive committee.....	5.00	
Dec. 27.	L. F. Dow Co.....	7.50	
Dec. 29.	Balance in Second National Bank.....	150.98	
			\$250.15

The report was, on motion, adopted and placed on file.

Colonel Wright presented the report of the executive committee as follows:

December 29, 1905.

The Minnesota National Guard Association.

Gentlemen: The executive committee of the Minnesota National Guard Association herewith submits its fifth annual report, covering the year 1905.

A—FEDERAL LEGISLATION.

Among the several measures recommended to congress by the Interstate National Guard Association at every convention since the act of June 6, 1900, none, perhaps, equal in importance the proposed increase of the federal appropriation for the support of the militia from one million to two million dollars. The

action of this association, at its last meeting held in St. Paul during the month of June, 1905, was therefore centered exclusively upon this measure.

With the co-operation of General Oliver, assistant secretary of war, the text of a bill, providing for such increase and enlarging the scope of the appropriation, was adopted. This bill has been introduced in the senate of the United States by Senator Dick, and in the house of representatives by Mr. Morrell, chairman of the committee on militia. It is known in the house as H. R. 7136, "A bill to increase the efficiency of the militia and promote rifle practice." Since the temper of the present congress is opposed to any increase in the appropriations, strong and united action on the part of the national guard organizations of the several states will be required to secure the passage of the bill.

B—STATE LEGISLATION.

In its last report to the association, this committee recommended that state legislation be secured:

1. "Permitting the national guard to join maneuvers and allowing the use of its funds to supply the difference between federal and state pay.
2. "Removing the limit established by law in the purchase of quartermaster's and ordnance stores.
3. "Providing for a hospital corps.
4. "Providing for the discretionary detail of a summary court officer in field officers' courts."

These recommendations were approved by the Minnesota National Guard Association, and the executive committee was instructed to take all proper means to carry the same into effect. The executive committee presented these suggestions to the legislature in the form of a bill which was enacted into law and is now known as chapter 225, General Laws of 1905.

Your committee was also successful in causing to be restored some important provisions which had been dropped from the military code by the statute commission in charge of the revision of the Minnesota laws.

Since this association will meet again before the next session of the legislature, the executive committee will reserve further recommendations involving legislative action until its next report.

C—MISCELLANEOUS.

The Interstate National Guard Association met in St. Paul, June 19-20, 1905. With the assistance of the local officers, and an appropriation of \$500 by the common council of the city, the executive committee was able to provide for the entertainment of the delegates of the several states and territories, the assistant secretary of war and his party, and other distinguished guests, at a cost of only \$34.77 from the funds of the association. The efforts of the committee were well appreciated as shown by the following letter received by your president from the chairman of the executive committee of the Interstate National Guard Association:

"I want to take this occasion to thank you and, through you, the other officers I met in St. Paul, for their kindness and hospitality. I assure you it was thoroughly appreciated. We have never had a convention where so many of the delegates went away singing the praises of their entertainers."

At the close of the Civil War, and for fifteen years thereafter, the people's interest in military matters gradually declined. A similar condition prevailed after the Spanish war. Whatever may be the cause of this tendency, the fact remains today that the attendance at drills, recruiting and the performance of military duty in the national guard are not altogether satisfactory. The underlying causes of this condition, and the proper remedy which may be proposed to stimulate interest, are subjects which could be profitably discussed by the members of the association at their convention.

Brigadier General William B. Bend, retired, died at St. Paul, November 26, 1905, after an uninterrupted service of twenty-five years, seven months and twenty-

five days in the national guard of this state. In view of the valuable services rendered by General Bend to the national guard it would seem proper that fitting resolutions be adopted by the association and transmitted to the family of our deceased comrade.

Respectfully submitted,
GEO. C. LAMBERT,
Major First Artillery M. N. G.,
Chairman.

The report was, on motion, adopted and placed on file:

The following communications were read:

Carver, December 22, 1905.

Major Geo. C. Lambert, St. Paul, Minn.

Sir: Your invitation card and program to the annual meeting of the Minnesota National Guard Association received. I extend to you my sincere thanks for the compliment. You are aware that I have taken great interest in the national guard and do so yet. Would like to meet the courageous officers and pleasant gentlemen once more; and chat with them over passed reminiscences. But also; it cannot be. The fracture of my leg is not sufficiently healed to allow a journey, especially if the walks are icy and slippery. I am able to walk about the house on crutches, but would not venture outdoors.

Will you kindly extend my greetings to the officers? Tell them that I hope that they will continue to entertain towards me friendly feelings.

I beg leave to assure you of my everlasting gratitude and remain,

Most respectfully,
HERMANN MUEHLBERG.

New Ulm, Minn., December 26, 1905.

To the Minnesota National Guard Association, St. Paul, Minn.

Gentlemen: I regret exceedingly that I am unable to attend the annual convention of the Minnesota National Guard Association assembled at St. Paul, December 29 and 30, 1905. My business is such that I cannot absent myself from it on the last two working days of the year. However, I will do the next best thing and be with you in spirit. It is my firm conviction that much good would result if the brigade was assembled for a ten days' tour of duty at some convenient point, where as near as possible all the conditions would attain that exist in actual warfare. Practice marches and field exercises could then be attempted on a much larger scale than is possible at a residential encampment. Officers and men would also acquire better knowledge of how to care for themselves in the field. As near as possible the subsistence of the troops should consist of the government rations and the preparation of the same should be by enlisted men under the supervision of competent officers. Orders have recently been issued by the war department requiring all officers of the subsistence department to take lessons in baking and cooking, in order to be prepared to give valuable information to company officers. At least one officer in each company and battery of the national guard should be competent to instruct his men how to prepare food in the field. This information the officer can easily obtain at his home station. My observation has been that a great deal of the sickness among the men in campaign is caused by the improper preparation of the food. At the beginning of the Spanish-American war, in the 12th Minnesota volunteers at least, several companies did not contain one enlisted man that possessed a fair knowledge of cooking. This deficiency soon made itself manifest by the large number of sick. We should always strive to profit by previous experience and this lesson cannot be too well learned. The practice of hiring civilian cooks at the annual encampment should be discouraged. Civilian cooks have no place in the army and a company or battery of the national guard that must depend on civilian cooks is indeed in a sorry plight.

A general complaint has been made by regimental commanders that too much time is devoted to rifle practice at our annual encampments. My observation has been that a great deal of the work on the range is primary and the instruction should have been imparted to the soldier at his home station. In this connection it will be observed that several companies possess many excellent shots, while others are woefully deficient in this respect. The success of the one and the

deficiency of the other has but one explanation. The one is fortunate in the possession of a competent instructor while the other goes about the work in a haphazard manner. We are all proud of the showing our rifle team made at Sea Grit, being their first entry with large company, and we should all strive to accomplish still better results. I would most earnestly recommend that as soon as weather conditions are favorable next spring a school of rifle practice be established at Camp Lakeview, and that at least one officer and one enlisted man from each company, who have the faculty of imparting information to others, be compelled to attend such school. The school should be under the direction of the Adjutant General, and the most competent officers he can select. If such a plan is adopted every company in the guard will have at least two able instructors and a great deal of the work which is not now attempted at the annual encampments can be intelligently performed at the home stations, and in this way more time can be devoted to such instruction at camp as can not be imparted to troops at the home stations. I am aware of the fact that many companies practice on their home ranges previous to the annual encampment, but owing to the absence of a competent instructor the soldier derives but little knowledge of how to use his rifle effectively.

Trusting that I have not burdened you with these few suggestions, and wishing you one and all a "Happy New Year," I have the honor to be,

Very respectfully,
JOS. BOBLETER,
Brigadier General.

Zumbrota, Minn., December 27, 1905.

Friend Matson, St. Paul, Minn.

Dear Sir: I received your letter a short time ago asking me to be present at and take part in the program arranged for the meeting of the national guard to be held at St. Paul, the 29th and 30th of this month. I exceedingly regret to say that it will be out of the question for me to be there on account of business appointments with my eastern agents, which I cannot postpone. I had planned to meet with you this year without fail, but it seems that I cannot. Wishing you a happy and prosperous New Year, I remain,

Yours truly,
R. R. SIGMOND.

Major Hubert V. Eva, Third infantry, presented the following paper:

Should the troops in camp and in the field be subsisted on the army ration, and by whom should the ration be issued, a far-reaching and often underestimated topic to satisfactorily answer in an exhausted way, and I shall not endeavor to try your patience. On the other hand, it would not do to dismiss it, with a simple "yes" or "no," for its importance to the welfare of the soldier cannot be over-rated, for truly an army marches on its belly. The world has had but lately witnessed a wonderful example of the superiority of the well fed and cleanly Japanese, as compared with the filthy and improperly improvised Russian. From observation and experience it is my firm belief, that our troops should subsist strictly on the army ration (with perhaps a slightly greater allowance of sugar, the quantity at present furnished I consider insufficient for volunteer troops accustomed to a high percentage of sweetened foodstuffs). Of almost equal importance with the ration itself is the preparation of the raw material into wholesome and palatable food. To the interested and observer during our encampment of retention in Chicamauga Park it was obvious that many companies were poorly fed, and that, not because they did not receive the material for nourishing food, but on account of lack of knowledge by uninstructed men as cooks, in the art of cooking. And here is to my mind the most important point for the national guard to consider (the instruction by competent teachers, of experience in the regular army with the regulation ration to those men who enlist as company cooks). We detail men to the hospital service, bugle corps, etc., but we utterly neglect men for the all important function of supplying the troops with the highest obtainable results from good cooking, possible by the exclusive use of the army ration, a condition that has more to do with keeping healthy men well than any other agency known to physical man. I believe here is a point that should be taken up by the proper

authorities. Our state could here set an example which would, I feel confident, prove of inestimable value, and would, I doubt not be followed by all the states in the Union, and the result would be an army of trained cooks capable to properly perform their duties which would eliminate to the point of extinction, the cry indulged in by many during the Spanish-American war (that in the midst of plenty our men were badly fed) a cry, to be absolutely just, not always without a reason, and that reason due almost wholly to incompetent men presiding over army kettles.

There is a class of men in the service that treat the annual encampment more in the nature of a vacation holiday than a soldier's rendezvous, but they are not in the majority. The average man prefers to live as a soldier and glories in the little privations he endured. However, so as to make the transition from city living to barrack cooking not too strong, it would be advisable to allow the companies to purchase, whenever possible, milk and butter as well as fresh vegetables in addition to the army ration. To the query, "By whom should the rations be issued," it seems to me that only one answer is possible, and that is, by the commissary, who would soon master the difficult role of pleasing the company cooks, if they were all compelled to draw their rations from his store; in fact, how can a commissary learn his duty and achieve the best results unless all companies draw their supplies from him and the companies in turn will benefit by his experience and lower prices possible by the purchase of provisions in large quantities.

The recruit in the national guard properly impressed with the customs and regulations of the army in all its detail will make invariably the best soldier, remain in the company longer, and just because military life is different from his civil environments, feeling proud in his military obligations and the sternness of his calling.

HUBERT V. EVA,

Major Third Infantry, M. N. G.

Capt. W. E. Steele, commissary, First infantry, spoke briefly on the same subject, favoring the use of the army ration under proper conditions, and introduced Captain J. H. Parker, commissary, Twenty-eighth United States infantry, who gave a very interesting and instructive talk on commissary methods of the regular army, relating some of his experiences as depot commissary. Captain Parker thought the National Guard should, by all means, become familiar with the ration they would have to use if called into service with regular troops. He suggested that the components of the ration could be secured by the Adjutant General from the United States depot commissary at St. Paul, or, if this could not be done, they could be purchased in the open market.

This subject brought forth considerable discussion, participated in by Colonel Van Duzee, Colonel Wright, Lieutenant Colonel Corrison and Captain Murphy. The speakers all favored the use of the army ration. Captain Murphy moved that a vote of thanks be extended to Captain Parker. The motion was unanimously carried.

The death of Brigadier General Wm. B. Bend having been announced to the convention, the president appointed Lieutenant Colonel Frank T. Corrison, Captain Milton S. Mead and Lieutenant Harry L. Bullis as a committee to draw up suitable resolutions to be presented later.

The president appointed General Fred B. Wood, Colonel Chas. A. Van Duzee and Colonel A. W. Wright as a committee to wait upon the commander-in-chief and ascertain his pleasure.

Adjournment was then taken until 2 o'clock P. M.

AFTERNOON SESSION.

The convention, having reassembled, was called to order at 2:30 P. M.

The commander-in-chief, Governor Johnson, being introduced, addressed the convention, expressing his interest in the National Guard owing to his previous service therein. The governor thought that, if the Guard was organized as a brigade, it should assemble as such occasionally, and suggested that the Adjutant General, the brigade commander, and the commanding officers of the regiments should get together and express to him their opinion on that subject, he agreeing to do what was possible to carry out their ideas if possible. The governor's remarks were received with applause.

Major Wm. H. Rowe, surgeon, Second infantry, presented the following paper:

THE CARE OF THE MEN.

When we remember that, on the average, four out of five men, enlisted during time of war, fail to reach the firing line, on account of previous disablement by disease, and that during the Spanish war only 454 died from wounds, while 5,277 died from ailments contracted in camp or field, we realize how important is the subject, The Care of the Men. I would have much preferred that someone more capable than myself had been selected to write upon this, in my opinion, most important question connected with military affairs.

However, since the task has been assigned me it will be my endeavor, not so much to tell you anything new, as to call your attention to matters which are of so much importance, that they will bear repetition, and in so doing, I shall not only be guided by my own somewhat limited experience, but also quote freely from other writers upon this subject.

In considering 'the care of the men' the matters which present themselves are: food, drink, footwear, cleanliness, etc.

Food.

The function of food has been likened to the fuel which supplies the engine. but aside from supplying that which keeps the different functions of the body in activity, it furnishes material for new tissue to supply the waste which is constantly going on. No class of men should be taught to "eat to live rather than live to eat," more than the soldier. He is often far distant from large markets and therefore must carry with him food for days or weeks at a time. He should know not only what foods are necessary to sustain life, but also which of those necessary can be the most easily transported and kept fit for use.

A man in good health, taking active exercise in the open air, and restricted to a diet of bread, butter and fresh meat, with water for drink, consumes in one day about one pound of meat, one and one-fourth pounds of bread, one-fourth pound of butter or fat, and three and one-half pints of water.

These articles contain sufficient carbon and nitrogen for the nourishment of the body, and if supplemented occasionally with fresh vegetables or fruits will keep the man in perfect health indefinitely.

They may be taken as types of the food necessary for bodily sustenance, but others may be substituted. Bacon may be used in place of the fresh meat, and when used, butter may be omitted.

Milk contains the essential elements necessary to a varied diet and is alone capable of sustaining life and health indefinitely. It is, however, highly absorbent, and rapidly becomes tainted in an impure atmosphere. If there is a suspicion of its being contaminated, it should be boiled before using. This will destroy all germs and render them harmless. Hard crackers, rice, beans, peas and potatoes may be used in place of the bread, or substituted partially.

Sour bread may be utilized for food by toasting, as the heat volatilizes the acid. Of the concentrated foods, the one of most value is the extract of beef,

originally devised by Liebig, and now made on a large scale in many places. It is probably not a true food, but rather a nitrogenous stimulant, which stimulates the heart and removes the sense of fatigue. It would be an important special issue to pickets and to all troops after prolonged exposure. If it could be served out to the men in packages, with the extra ammunition, before an impending engagement, those who could be induced to preserve it until after the battle would have at hand a most valuable restorative for themselves and the wounded.

Fresh fruits and vegetables are of great value. They assist in regulating the assimilative process, act as a stimulus to the gastro-intestinal apparatus, and the lack of them in the diet, particularly onions and potatoes, is the cause of scorbatus or scurvy.

Cooking.

Articles of diet may be of the best quality and sufficient in quantity and yet fail in being nourishing and satisfying on account of the cooking. This fact was brought forcibly to the minds of all those who had supervision of the men's diet during the Spanish war and we were made painfully aware of the weakest spot in our national guard forces. For years previous to that time guard troops were furnished with a first-class caterer while in camp and the men themselves were taught absolutely nothing about preparing raw foodstuffs for the stomach. When mustered into the United States service and provided with the army ration, they could not use it, and in their attempts to do so either wasted or prepared it so badly that it was not only worthless as nutriment but also repellant to the eye and disgusting to the palate. I remember an instance, when a whole company marched down officers' row with their evening meal (which consisted of a bit of bacon, only fit for soap grease, a small burned potato, a biscuit which would outweigh its own bulk of lead, and half a cup of muddy coffee), on their plates. Who was at fault? Was it the government? No. The government ration, when of good quality and prepared properly, is nourishing and satisfying. Was it the men themselves? No. They had learned their lessons about warfare in the summer camps at home, and if they were not taught to cook it was not their fault. The fault lay with the officers of the national guard, who, in the attempt to make enlistment into the guard attractive, permitted a custom to prevail in the summer camps which fell far short in teaching the men all the duties of the soldier.

It is gratifying to learn that a recent order of the war department requires all commissioned officers of the regular army to receive practical instruction in the art of cooking. This is a step in the right direction, but the order should not be restricted to the regulars. The officers of the national guard, which must comprise the principal part of the fighting force, in this country, in time of war, should also be required not only to become familiar with the composition and preparation of the raw army ration but also thoroughly grounded in sanitary science—with the full complement of officers as instructors in sanitation and dietics and co-operate with the medical department, the care of the men would be much simplified.

It is an old saying that "an army moves upon its belly," and to teach every soldier the practical use and preparation of the army ration will make him more valuable as a fighting man than will any amount of training in the manual of arms or perfection in establishing an alignment. Qualifications for promotion from the ranks should include practical knowledge of the government ration and its preparation.

The diet during the summer encampments should be as near as practicable the same as the government food supply. It will be economy for each company to employ a competent cook, as instructor, but details of men should be required to do the work and they should be made to understand that duty in the cook house, however distasteful, is quite as honorable and more valuable to them, themselves, than some of the other exercises in which they take so much pride. When its importance is pointed out, the patriotic spirit, that inspires the men, will enable them to overcome their distaste for the work and they will bear this burden in common with other minor annoyances.

In connection with the question of food comes that of drink. As I have stated, a man in health requires about three and one-half pints of water, besides that contained in the food, every twenty-four hours.

The water supply is derived from springs, rivers, lakes, wells, etc. Springs are the outlets of underground water, and as a rule give a pure and sparkling stream. However, the surroundings must be carefully inspected to see that there be no chance for contamination by nearby sewage or other means of pollution. Deep wells also furnish a pure supply, but it must be remembered that a well drains an area of soil around it, the radius of which is equal to the depth of the well. Therefore, there must be no cesspools or latrines in that vicinity. Water from small lakes and rivers should never be used for drinking purposes unless previously boiled. Boiling is simple and easily performed and should be done whenever there is reason to believe that the water may be polluted, or during the prevalence of cholera or typhoid fever. Military officers should always endeavor to secure a pure water supply for their men, for it is almost impossible to have an order obeyed which requires enlisted men to abstain from unboiled water. Boiled water is flat and unpalatable, owing to the heat removing the gas or air which it naturally contains, and the average enlisted man, when ordered to drink nothing else, will watch his opportunity and, regardless of the effects upon his health, fill up on unboiled water. Those of you who had experience in Chicamauga Park will corroborate this statement.

Coffee, tea or chocolate may take the place of plain water. Coffee seems to be acceptable to the greatest number. Its physiological effect is that of a mild nervous stimulant, with probably a tendency to moderately delay tissue change. Its use as a hot drink, when not too strong, should be encouraged, as it ensures the boiling of the water and in cold weather the heat is a stimulant which does not react, and in summer it supplies, without risk, fluid lost by perspiration.

Tea has practically the same physiological effect as coffee. It is less bulky, and a supply can be more easily carried, yet it is not as acceptable to most men.

Chocolate is nutritious and palatable to many, but it is expensive and can rarely be prepared properly either in field or camp.

The use of alcoholic drinks by the soldier being yet "sub judice," I shall simply quote from one of the best military writers. "Malt liquors are frequently regarded as innocent, if not directly strengthening. They do contain nutritive material useful for certain invalids, but not for persons in such health as soldiers are supposed to possess. They produce plethora, and habitual excess of this overtaxes the organic and weakens the conservative powers, so that the florid countenance and fatness of persons addicted to fermented liquors are suspicious evidence of a constitution taxed to the highest, and constitutional predispositions that might not have been aroused are frequently excited into activity."

The habitual use of alcohol is no more necessary for the ordinary man of twenty-five years than it is for the lad of fifteen, for whom every one would shrink from advising it. Like any other medicine, its employment in health only results in the disturbance of health.

It is not necessary to insist, from theoretical or medical grounds alone, upon the mischief that the (habitual) use of alcohol causes soldiers. The observation of any officer of experience is enough. Liquor, to excess, besides weakening men physically, tampers with their will power, disturbs their temper, makes them less trustworthy when sober, is at the bottom of almost every violation of discipline, and is the one agent that can convert a regular force into a mob. (The absence of liquor usually means a clear guard house.) Abundant liquor means a heavy sick list, a large guard report, and a general feeling of doubt as to the command.

As the popular prejudice that a soldier is of necessity a drinking man, if not a drunkard, is one of our direct inheritances of English vice and stupidity, it is proper to lay emphasis upon these convictions of Parkes, the great military sanitarian, who reached them after long years of observation of the most drunken army of the world and a careful review of the whole subject.

He says: "When debarred from spirits and fermented liquors men are not only better behaved, but are far more cheerful, and less irritable, and endure better the hardships and perils of war. The courage and endurance of a drunkard are always lessened, while temperance raises the boldness and cheerfulness of spirit which a true soldier should possess. If spirits neither give strength to the (healthy) body, nor sustain it against disease—are not protective against cold and aggravate rather than mitigate the effects of heat—if their use, even in moderation, increases disease, injures discipline, and impairs hope and cheerful-

ness—if the severest trials of war have been not merely borne, but most easily borne, without them—if there is no evidence that they are protective against malaria or other diseases—then the medical officer will not be justified in sanctioning their issue under any circumstances.”

I can add nothing to the solemn weight of Dr. Parkes' opinion, which cannot be too frequently repeated or too well learned and practiced by every man who wears a uniform.

Foot Wear.

Much of the success in a campaign depends upon the condition of the men's feet. Officers should therefore instruct the men in their care and provide shoes for them which shall protect them in the best manner and not chafe or irritate.

The best shoe for marching is made of leather, has a wide, thick, yet flexible, sole, and a broad, low heel. It should be without inside seams and a good fit, to prevent binding or chafing. A waterproof dressing made by dissolving, with gentle heat, half a pound of shoemaker's dubbing in half a pint of linseed oil and a half a pint of solution of India rubber (it is very inflammable) and applied to the shoe occasionally, will help to keep the feet dry and add much to the preservation of health.

In the choice of material for stockings, it is concluded that cotton is better than woolen. Woolen stockings are apt to cause free perspiration, which softens the feet and adds to their liability of becoming frozen in winter and chafed in summer. Sore feet should be well washed and then greased. The German army uses a mixture of two parts of salicylic acid to ninety-three parts of mutton suet for foot-sore and saddle-chafed men. Enlisted men should be instructed to bathe their feet daily, and if unable to get sufficient water to bathe both face and feet, use it on the feet.

“Cleanliness is akin to Godliness,” and in the case of the soldier eternal vigilance in the matter of cleanliness is the price of health and comfort. Unless men who are congregated in camps keep themselves, their clothing and their surroundings clean, they are soon not only overrun with vermin, but also the victims of filth producing diseases.

Cleanliness of the soldier's person, as well as of his habitation, demands a vigilance by the officer not always exercised. It is not sufficient to see that the arms are bright, the uniforms spotless, and the bedding neatly arranged. Dirt that is hurtful is not the mud of the highway or field, caught on the outside of the shoes or clothing; it is the cutaneous debris, mingled with dust and dissolved in perspiration, soaked into the underclothing,—organic dirt that offends the nose as well as the eye, that depresses the individual and may poison his comrade. Every opportunity should be given the men for bathing their whole bodies, their hair should be kept short, and, if necessary, to secure proper cleanliness, their necks, breasts, legs and feet should be regularly inspected. They should be encouraged in swimming, as it is not only good exercise but also an hygienic measure. They should however, be cautioned not to remain in the water too long at a time, and not to swim under water on account of the liability of injury to the hearing.

If the men swim actively, there is no danger in plunging into the water when perspiring moderately, and not as much danger of taking cold as when they sit down partly undressed to cool off.

The average recruit is as prone to neglect and disregard the laws of health, as water is to run down hill, and the officers of a command, both medical and line, who would properly care for their men must keep an ever vigilant watch over their interests and welfare. They must, in short, be good disciplinarians. By the term “good disciplinarian” is meant an officer who would not require any duty of his men that he, himself, would not be willing to perform were the situation reversed, but having issued his orders would require absolute obedience thereto. Discipline was the secret of the success of the Japanese in caring for their men, keeping them free from camp diseases and at all times having a fighting force approximating, very closely, their total enlistment. This was accomplished, in their case, not because of any superior intelligence of their officers or men but due wholly to the conditions which have prevailed among them as a people for centuries. Subject, as they have been, to the dictation of the govern-

ment concerning their food, drink, clothing and acts, their obedience to orders issued to them as soldiers has been absolute. It is not to be desired that American soldiers should yield this blind obedience, yet such discipline is desired and may be secured through intelligent co-operation of all officers. Let every commissioned officer be thoroughly trained in sanitation, dietetics and hygiene, as these matters pertain to soldiers and to camp life, they will then be in position to instruct and advise their men and by appealing to their reason secure from them that absolute obedience, without which the “care of the men” must ever be difficult and imperfect.

Colonel A. W. Wright, Second infantry, presented the following paper:

Mr. President and Gentlemen: The national guard is a reserve force of the United States, the second line of defense, the training school for the main defense, if our little standing army of 50,000 men or less can be called a first line. It stands for loyalty, national and state honor; its usefulness can only be fully reckoned with when the test comes, but that it has been and will be useful is a foregone conclusion, the extent of its usefulness being contingent upon our earnestness and our labor.

To make the guard useful and keep it up to the standard we have set for it, and which has been set for us, means hard self-sacrificing labor. It has always meant this, and in years past it has also meant personal expense in no small amount.

The guard with the army is a training school and as such it will, I apprehend, find its greatest good. If we were required to put half a million men in the field 20,000 or more officers would be required. The army cannot furnish that number; they must and should be obtained in the guard, and upon how well we do our work depends in a large measure the result of the wars in which this country shall be a participant.

The real nationalizing of the guard has added very largely to our responsibility, has given us new opportunities, increased the scope and dignity of our positions, taking it from a purely state force, at least so considered and treated, to one of national importance, and therewith we have acquired national aid and consideration, and we are justly entitled to, and do, receive most generously the aid and assistance of the officers of the army, who realize that they may sometime have to fall back upon this, their second line of defense. It is incumbent upon them to know how this line is constructed and whether its defenses are good and whether the men constituting its bulwarks can be depended upon.

In this connection I am constrained to say that we can not be regulars in all that such term is understood to mean; we may be very regular and very energetic in our work, but we depend upon men whose only pay is the love of blue clothes and brass buttons, with a gun, or, as I prefer to think, love of country, and whose only time to prepare is one evening in a week, more or less, for a few hours, and who must work hard all the rest of the time for a livelihood. We have no opportunity to make hardened regular soldiers out of them, at best we can only teach them the rudiments of military knowledge and put them in the way to master the details themselves, and give them such instruction and such schooling as will enable them in an emergency to quickly shape themselves for the occasion.

Much has been said about the maneuvers that have been had in various parts of the country when the army and the guard have joined forces and have worked out problems. There has been a marked difference in the plans of camps at different places and in some of them I doubt not the results have been good, and these army maneuvers appeal to all of us as a very desirable feature of our training; but there has been in other places a marked misunderstanding of what can and should be expected of the national guard; it has not been realized that men cannot be taken from the office, store and factory and put instantly into field exercises with long marches with any advantage to themselves or to the service. It is reported that at Manassas the guard troops after being on the train from twelve hours to four days were thrown immediately into the battle formation, kept on the march all day, bivouacked on the field at night, marched all day, again returning to their camp between 6:00 and 12:00 o'clock at night and were ordered out at 4:00 o'clock the next morning for two additional days, “marching great.

distances than any troops in either of the battles which make that field historic, except the march of Jackson's corps." There was no attempt made to teach them how to take care of themselves on these marches—they were not equipped with army shoes, they had no particular instructions as to the kind of clothing suitable for such marches or the amount that they could reasonably carry. Says one writer: "The punishment inflicted upon these troops was such as has seldom fallen to the lot of soldiers in actual war." Small wonder that these men could not stand such a strain, and the criticism of the press, and of officers in command of the army, is entirely unfair and unreasonable to the guard; that many were not able to be present upon the review on that occasion is not to be wondered at. The officer in command of these troops should have kept them in camp at reasonable drills, for a short time at least, in preparation for the harder labor and the results would have justified the course. A few repetitions of this sort of thing would mean the practical extermination of the national guard if it were compelled or expected to engage therein. The report of Manassas impresses me principally as a failure, the lessons from which will be beneficial.

If you ask the officers of the guard, here assembled, why they have spent so many years and so much money in the support of their organization, they will in their hearts say that it is the spirit of '76, '61 and '98, that the labors are many and the benefits otherwise few; because of this very sacrifice the record and standing of the guard should be kept very high; it should never be used for political or commercial purposes. There has been no more deplorable sight than that of Colorado using its guard in a direct fight to destroy a union and not solely for the purpose of protecting life and property. The laws should be such as to punish with the utmost vigor any officer, be he subaltern or commander-in-chief, who uses these forces for any color of oppression or to favor any faction, be that faction laborer or employer. On the other hand, there should be no unreasonable delay when other means have failed, in using the guard when the laws are violated and property is destroyed in defiance of law and order, and when so used the officers and every man should be fully protected by proper laws and should be enabled to carry out his orders fearlessly and to the end that order might be sustained and law enforced, but beyond the necessary protection of life and property these laws should not go. The scenes in Colorado were an outrage on American citizenship, a dishonor to the high officers engaged and a dishonor to the state, and if such a performance should be repeated in this country it would in a large measure destroy the guard and its usefulness. Mark you, I do not approve of lawless acts whether these acts are committed by men belonging to a union or men who are employers. When any class of people become lawless or attempt to destroy property and life to gain personal ends, be that end to prevent the employer to employ men in their places or to prevent the labor of men who honestly wish to work, I look upon them as traitors to the best American citizenship, and when they thus defy civil authority and pass beyond its control it becomes time to make use of the army forces.

It is to be deplored that the unions so called and the Socialists so called take the position of active opposition to the guard. In Illinois the Plumbers and Steamfitters' Union, of Springfield, demanded the resignation of Captain Waltz, of troop "D," who was superintendent of a plumbing concern; be it said to his credit that he was man enough to stay by his troops and resign his employment. Such a position taken by the unions only mean, and we must interpret it to mean, that they desire to be lawless, and to further their own ends take life and destroy property, else why should they object to a properly equipped body of men who shall fairly stand between the opposing forces and say to those on either hand: Let your acts be those of peace and order. If these unions did but know it, the strongest element for their protection is such a body of men, and they should be glad to have enlisted in this organization members of their own organization. I look upon such opposition on the part of such societies to the enlistment of their men and to teachings which lead their men to keep out of the military forces of the United States for the reasons which they give, to be active treason, to the best interests of this country.

But there is another class of men for whom laws equally stringent should be made and that is the employer who, from mere pettishness or narrowness, or thinking only of the few cents gained, refuses to allow his employes to go to the

stated drills or to the annual encampment, or if he lets them go at all does so under such rigorous requirements that they either lose their places or suffer large pecuniary loss; they do not seem to think that they may be the very ones between whose property and its destruction these men may have to stand a wall of defense with their lives endangered as well as their positions, and that they may be the very ones who would profit most in every way by this organization. The employer who does not encourage his men in doing their full duty to maintain the guard has either not given the subject much thought, or is too small and too mean to enjoy the privileges of a well governed country. What if he were ground down by heavy taxes to maintain a great standing army? What if his sons were conscripted in the service to spend many years of the best of their lives before the colors? Why is it that American people so free and so untrammelled from the burdens of the Old World, are yet so unwilling to perform and encourage the performance of the small obligations required of them by our state and nation? It is a duty every man owes his country to do all that he reasonably can to sustain its national honor. Small price he pays who but spares an employe for a few days to help in its national defense and if men will begrudge so little they should be forced to do what they begrudge by a law, punishing suitably for the discharge of any man from his employment for honest attendance on drills at home or in camp.

We must not in this country of ours let anything interfere with patriotism and self-sacrificing courage. The days of knighthood in the sense which we read in the novel may have passed, but the day of knighthood has not passed in the sense that every American citizen should be a knight whose sword and whose life is always ready for the protection of his country's honor. It has often been predicted that the final end of this republic would be the reduction to gross materialism and the loss of patriotism. I do not believe it, but let us stand, gentlemen, for honest citizenship, honest politics and honest, fearless government and for a progressive, practical national guard organization, and let us make it as effective and complete as we can; let us master the duties of field service incumbent on its various branches and train as many men as we can to fill responsible places. Gentlemen, you belong to an honorable organization; your services are patriotic, you stand for peace and for national honor; you stand for the stars and stripes. Let nothing be done that shall in any manner detract from your position or from your honor. Consider each question as seriously and as fully as you would consider the questions of your personal affairs and you will indeed constitute a second line of defense and the results of each trial will indeed prove your usefulness.

Brigadier General Fred B. Wood, Adjutant General, presented the following paper:

To defend their state and the United States against all their enemies, foreign and domestic," being the object for which the national guard is formed, make it the solemn duty of our legislators and those in authority to afford the patriotic men composing it every opportunity to fit themselves for their arduous task. It is not sufficient that men should be given arms and taught how to use them; but in order to prevent avoidable hardships, they should in peace be instructed how to work together for a common purpose, and to take care of themselves in camp, on the march and in the field.

While with diligence on the part of the officers and the good will of the men, the elementary training of the individual soldier and the company may be accomplished to a certain point at home stations, we should ever bear in mind that the practice field is the best school for war. For this commendable reason, camp work is taken up by troops whenever practicable.

The limited financial resources at our disposal; the difficulties the members of the guard have to overcome in order to get away from business for any length of time compel us to shorten our camping period, and the limited territory we have to camp on hampers us in the work we should necessarily take up. All the more reason then, intent as we are to do our utmost that we should in the short period we can devote to camp life, do away with all those things which can be done at the company station.

First we will take up guard. This may be practiced during the entire camping period, by mounting large guards and relieving them twice a day; all may

partake of this instruction. It must, however, not be performed in a perfunctory manner; both officers and men must realize that this is one of the most important tasks of the soldier and there is no better test of the quality of a man off the fighting line than the manner in which he departs himself on post.

We should pay much attention to extended order exercises. But a short time by company, simply long enough to give officers an idea of the difference in conditions between an armory floor where manual forms may be studied and the field where the forms must be practically applied and modified as intelligent observance, common sense and good judgment dictate. As soon as this preparatory work is done we should proceed to work in larger combinations, the battalion and regiment. Here we can find also the opportunity for battalion and regimental drills in close order. By combining close and extended order work, we break up the monotony otherwise unavoidable, we should not devote the many hours we must drill in order to accomplish anything continually to one class of exercises. The art of giving proper directions and orders to troops in the field is one of the most important features in exercise of command, also the issue and the transmission of the same and the messages, reports, sketches, etc., incident thereto. And under this head would come estimating of distances which, under existing regulations, is exceedingly important to all officers and non-commissioned officers and should be practiced whenever possible.

We have under the head of field work a section called security, and it is equally important with other branches, perhaps more so in that it is the eyes and ears of an army at all times, and it is classified under the head of: Advance guard, flank guards, rear guards and outposts. This work must be taken up in camp and not to better advantage than by such detachments as the regimental commander may deem best to send out for practice marches and for an all night bivouac, teaching them the elements of composing the column, formation of same and the preparation and start, bearing in mind the location of their evening camp as to its defensive position.

Minor problems may be worked out by using one battalion on defensive and the others on the offensive, or vice versa.

Target practice necessarily takes up a great portion of the few camp days. We cannot slight this work without detriment to the efficiency of the guard. However, by judicious division of time and carrying on of range work by tactical units, the larger the better, small arms instruction can be pursued by one part without harm to other interests.

While one battalion is on the range the other two might do field work as before mentioned. Too often we lose sight of the fact that all drill, manual of arms, accurate alignment, turning by squads, etc., are merely the means by which to attain the end of making men practical soldiers capable of performing field exercises and duties. This instruction can and should be given at home stations. A like remark is applicable to small arms practice. Aiming and sighting drills, and gallery practice can, with a little effort, be carried on at every company station; nearly all organizations can take up outdoor practice, at least at short ranges. The company which has made most of its opportunities at home will rank highest in camp and will profit most from instruction there; all should aim, therefore, to come to camp as well prepared as possible; they owe this to themselves and their comrades. One poor company will be a dead weight in a battalion or regiment. But let us not forget that drill alone does not make the efficient soldier; he must also learn to take care of himself and for this instruction camp offers the only real opportunity he has the year around. We should therefore pay every attention tending to preserve the health of troops, and here the instruction of officers in sanitary science is imperative. It should be the care of the medical staff to aid them in every way possible by lectures and object lessons. Officers of the supply departments should make use of every facility which may offer, while in camp, to familiarize themselves with army business methods, so in case of need they may be able to obtain supplies, etc., without worry and friction. While paper work should not be attempted to any considerable extent, it is certainly profitable to require the use of regulation guard and morning reports, and to teach troops how to prepare ration returns and requisitions for other supplies which they will have to draw the moment they go into active service. While our war instruction is best obtained on the practice field, it may

be supplemented by theoretical studies and here camp by bringing officers together, serves an excellent purpose. The time is too short to attempt a regular course, but the few spare hours which can be devoted to this purpose may, if judiciously used, incite to and point out the way for profitable study, and regimental commanders can exert their influence hardly to a better purpose. Just a few words about reviews and other ceremonies. Considering that besides instructions we have also to arouse public interest in our state military organizations and show courtesies to the commander-in-chief and other superiors, we ought not to dispense with them. If the troops have made the proper use of their time at home, they will make a creditable performance in this direction as soon as they have rehearsed once or twice in large bodies, and the daily evening parade will then present the best opportunity for observing whether they have conscientiously done their individual work which is the essence of military proficiency.

General Chaffee, commanding the army of the United States, made the statement at a meeting recently held in Los Angeles, Cal., that "In his opinion, the United States would have war and at a period not far distant. Whether it would take place on our own or foreign soil, he was unable to state, but he believed that those present would take part in it." Let us then so work that when the time comes the troops sent by Minnesota will be able to uphold the honor of the state as in the past.

Major R. L. Bullard, Twenty-eighth United States infantry, presented the following paper:

THE AMERICAN VOLUNTEER SOLDIER FROM THE BOOKS AND AS I HAVE SEEN HIM.*

The customs of a people are not changed in a day nor even in an age. Let us not, therefore, be deceived by visions, schemes or prophecies of a great trained standing army or a special trained reserve for our country. You and I will not see them but your wars and mine will, as in the past, be fought by volunteers. It is, therefore, the manifest duty of every one of us into whose hands may fall the command of such forces, to study generally the methods of raising and organizing them, their temper, qualities and characteristics, that he may, if possible, know how to attain real as well as nominal command of them, know what to expect of them, and learn the best methods of dealing with them in camp, in campaign and in battle.

In pursuing this study for my own benefit, I made, of such things as to me seemed noteworthy and especially of such as seemed usually overlooked, the incomplete notes which are here in a pinch of time strung together into a disconnected article.

I. THE VOLUNTEER FROM THE BOOKS.

(From notes before the Spanish-American War.)

Whatever may be the scheme or law for enlisting volunteers in future wars, it may be safely said that no plan can be put in successful practice and no law enforced unless it accord with the temper, customs and traditions of our people. This means that the enlistment of volunteers will be done still in the way of our fathers, that is, largely by private initiative, a citizen sometimes without a commission, sometimes without even a suggestion from the state authorities, raising a company, battalion or regiment and tendering its services to the state. This were raised the armies that fought the great Civil war, and thus, no doubt, will be raised the armies that will fight the wars of this, our generation. No doubt a large number of our national guard organizations will offer and be accepted as wholes but many will be too thin in the ranks. To fill these then and to add others we shall have to resort to the traditional methods of the past.

From this broad experience a few things touching enlistment and recruiting stand out in striking significance and as our guides for the future: First, for recruiting officers, volunteers are unsurpassed, incomparable for speed and effect;

*A paper read before officers of the Minnesota National Guard Association December 29, 1905.