

"standing alone, cannot justify the relief sought."

No doubt there are sometimes circumstances outside of danger to health that justify objections to the erection of such institutions in the locations chosen, but generally the objections are entirely speculative and do no honor to the objectors. Carried to their legitimate conclusion, such objections would exclude sanatoriums and hospitals from every desirable spot in civilized communities, as some one might be willing to pay a little more for adjoining acres if the institution were not there. The New Jersey court acted justly and wisely, but what a standard board of aldermen, controlled by political considerations, would have done in such a case is not hard to guess.

THE ASSOCIATION OF THE MEDICAL OFFICERS OF THE ARMY AND NAVY OF THE CONFEDERATE STATES.

Dr. Samuel E. Lewis, Secretary of this organization, announces its next annual

meeting during the Reunion of the Confederate Veterans, at the Hotel Tutwiler, Birmingham, Ala., May 16-18, this year.

Under the new constitution, in addition to the former membership of surgeons, assistant surgeons, acting assistant surgeons and chaplains, it is now provided that all Confederate soldiers or sailors (though not then medical officers), but who after the war became and are now regular practitioners of medicine in good standing; and all regular practitioners of medicine in good standing who are the sons or grandsons of Confederate soldiers or sailors, have been made eligible to membership and are hereby invited to be present.

The living Confederate surgeons are few but they and their descendants should unite with this organization which aims to perpetuate the memory of the splendid achievements of the Medical Corps of the Confederate Army whom "fate denied victory but crowned with glorious immortality."

SPECIAL ARTICLE

MEDICAL PREPAREDNESS.

The lesson of the European war is that of preparedness. This has found its echo in our own country, where the question of the day is that of national preparedness against war. We are, however, a people of peculiar temperament, holding our allegiance with tenacity to but two issues, our politics and our religion. I trust we as a nation will add preparedness as a third and vital issue. We are a forgetful people, carelessly throwing aside a lesson learned at the expense of war. And, judging from past experience, if the war in Europe were to end today in a year the question of preparedness would become entirely academic. Preparedness is, therefore, a question that can be kept alive only by educating public sentiment to understand that prepar-

edness is the premium on the life policy of the nation. While the whole question is at this time of interest to us as a nation, the question of medical preparedness is of the utmost interest to us as medical men, and the medical preparedness of our army depends upon public sentiment, a sentiment that will demand a trained personnel of sufficient strength not only for peace duty with the army but a medical corps of such strength as to permit of the necessary expansion in time of war, without its complete disorganization as an organized unit. This requirement was appreciated by one of our Presidents, who in a special message to the Sixtieth Congress said:

"The Medical Corps should be much larger than the needs of our regular army in war. Yet at present it is smaller than the needs of the service demand even in peace. The Spanish war oc-

curring less than ten years ago. The chief loss we suffered in it was by disease among the regiments which never left the country. At the moment the nation seemed deeply impressed by this fact; yet seemingly it has already been forgotten, for not the slightest effort has been made to prepare a medical corps of sufficient size to prevent the repetition of the same disaster on a much larger scale if we should ever be engaged in a serious conflict * * *."

The medical history of the camps of the Spanish-American war is a sad commentary on medical preparedness—yet in less than 10 years the lesson was forgotten! Public sentiment makes a war popular, or in other words makes for a national war, on the other hand nothing arouses the indignation of a people quicker than medical unpreparedness, and when a war becomes unpopular because of unnecessary suffering and loss of life, in a country such as ours, public sentiment influences the result of a campaign and determines in no small measure, victory or defeat. It will be public sentiment that forces legislation towards national preparedness, in so far as the combatant branches of the army are concerned, and it will be only by the expressed sentiment of the medical profession that we will obtain medical preparedness, for the public is not educated up to the question and gives scant heed to the matter until the stress of war shows the insufficiency of medical preparedness for war.

In past wars the lack of medical preparedness was a national humiliation. The unnecessary suffering and the lives uselessly sacrificed caused in each war a wave of horror and indignation to sweep over the country, yet in a few months this was forgotten. In case of war, past experiences would be repeated, another wave of indignation, another report of a "Sanitary Commission," or another "Dodge Report," with its recommendation for "a large increase in the medical corps." The lesson again learned would be forgotten within a few years because of the lack of public sentiment demanding medical preparedness.

What are the requirements of a medical corps? To the uninitiated the answer is a matter of surprise, for few know that in war more than one medical officer is required for each 100 men under arms; for example, an army of 200,000 men in the field, with but one base and one line

of communications will require, according to the "Tables of Organization," 2,035 medical officers, allowing for only 10 per cent. of sick and wounded, and yet one battle may give us a much greater number of casualties. This is not all. The present plans are for recruit depots to supply the loss of men at the front, reinforce the army by a number equal to the casualties so that the army will always be of a normal strength of 200,000 men, the medical officer has the health of the army at the front to look after as well as its percentage of the sick and wounded, plus the percentage of sick and wounded from the number of men required to always keep the field army up to its normal strength, 200,000 men.

Austria now provides hospital accommodations in home territory for 40 per cent. of the army in the field. Upon this basis it would be necessary to provide hospital accommodations for 80,000 sick and wounded for an army of but 200,000 men, necessitating one hundred and sixty hospitals each of 500 beds, with 3,040 medical officers. These figures do not take into consideration the medical officers necessary in home territory for administration, recruit camps, supply depots, convalescent hospitals, for duty with the coast artillery, etc.—these details would require several hundred additional medical officers.

I do not mean that this total of medical officers would be needed at the beginning of hostilities, but the 2,035 with the army, from the base to the zone of advance, plus the additional number necessary in the home territory for administration, examination of recruits and other duties would be needed upon the outbreak of hostilities.

To supply the deficiency we have the Medical Reserve Corps, of 1,500 medical men—not more than 50 per cent. of whom are available for duty at the front. About 300 of this number have had some training, the remaining number necessary must come from civil life, and are without the training in medico-military administration and duties that distinguish the medical officer from the civil practitioner.

We must then commission and train as medical officers the medical men who volunteer for service. In the past this has been unsatisfactory. As, for example, in

the Spanish-American war and the Philippine insurrection it required for each year of hostilities 647 medical men in order to keep an average of 383 medical officers on duty. This was exclusive of the regular corps. This means that the department each year carry on the roster almost two men to do one man's work.

Requests for increase in the Medical Corps have been met with the argument that such increase was unnecessary for the reason that in our country there are thousands of medical men who in time of emergency would tender their services and do their utmost to assist such wounded as we might have. But the duties of a military surgeon are vastly more complex than those of his civil brother, and no matter how capable the latter may be in civil practice he can not take the place of an officer trained in medico-military duties. In case of war we expect that the professional work will be cared for almost entirely by the officers of the Medical Reserve Corps and the civilian practitioner, using the medical officers to fill those positions which in war, even more than in peace, imperatively demand a thorough familiarity with the processes of military administration. Unless medical officers sufficient in number for these positions in time of war are provided and trained in time of peace, when war comes men untrained in military administration must be called on to fill them, thus placing the Medical Department in a large measure upon a volunteer basis at the very beginning of hostilities with the same demoralizing results that have always followed this procedure.

Doctors are not medical officers, and can not be made medical officers with a knowledge of medico-military affairs except by training. Training is the one essential. An untrained army is doomed to defeat when it comes in contact with a trained army. An army trained in its combatant branches alone, but not in its staff corps, is an army fighting under a handicap, and will suffer unnecessary losses. An example of this loss is the loss from sickness that depletes an army of its fighting strength and increases the costs and burdens of war, and pensions after the war.

History is full of examples of disintegration of armies from this cause. Sick-

ness in past wars has caused the greatest number of casualties. We have no figures as to the ratio of sickness in the various armies now in the field. Some of these armies are short of medical officers, and most of those on duty with the armies were untrained at the opening of hostilities. England was, in October, 2,500 medical officers short of the number then necessary for duty with the army in the field. The only statistics as to losses we have are from press dispatches. Thus, the British army from April 25 to October 20, 1915, removed from the Gallipoli Peninsula 78,000 sick (press dispatch, Nov. 3, 1915, reporting statement in House of Commons by the Parliamentary Under Secretary of War.) Later dispatches, Nov. 15, 1915, stated that 90,000 sick had been taken from that single area of operations. This is a high sick rate. How much of this sickness may fairly be attributed to the shortage of medical officers, and how much to the military inexperience, are questions, of course, entirely within the zone of conjecture. It is a fair conclusion, however, from the lamentable history of our own wars that such shortage and inexperience were material factors in producing these calamitous figures.

In all past wars this country has relied almost entirely upon volunteer service. This policy of no preparation is shortsighted and expensive, for it means that, when war is imminent or actually declared, we in our eagerness to organize an army commission men as officers, in both line and staff, who are unfit for such commission, by lack of ability, by lack of training and by lack of those qualities that are necessary in leaders of men. In order that the Medical Department might not again be in the same unfortunate position, the Act of April 23, 1908, created the Medical Reserve Corps. The Medical Department is the only department of the army that has a reserve of any kind. The primary object of the Medical Reserve Corps is to have at the service of the government a body of medical officers, trained for their duties in war.

This object has not been accomplished, but the outlook is now more promising. Camps of instruction will be established during the coming summer for the purpose of giving field training to officers of

the Medical Reserve Corps. It is hoped that these camps will be even more successful than camps held last year. A correspondence course has also been established at the A. F. S. and C.'s for medical officers at Fort Leavenworth. Over 700 officers of the Medical Reserve Corps have signified their intention of completing the theoretical course offered, which is a graded course and will require four years for completion. Harvard Graduate School of Medicine has a course in military medicine.

Another plan now under way for preparedness is the organization of units. This was brought out by Dr. Crile, of Cleveland, in an address before the Clinical Congress of Surgeons at Boston, October 28, 1915. His plan was for the organization of surgical units, a plan that worked with marked success in the case of the various university units sent to Europe. The plan of the department is broader. It is to expand the surgical unit into a base hospital or hospital unit, the unit to consist of both surgical and medical services; the chief of each service to choose his professional assistants. Attached to these hospital units are the specialists, including neurologists, orthopedists, ophthalmologists and aurists, pathologists, roentgenologists, dentists and such others as may be necessary. These specialists are to be selected by the chief of the medical and surgical services, but to report directly to the commanding officer of the hospital. The chief of the surgical section in addition will choose his operating room force. Ward nurses will be obtained through the Red Cross; this organization now has over 6,000 nurses on its reserve list. These units are to be organized by officers of the Medical Reserve Corps, and the chief of each service, surgical and medical, is to see that all members of the unit apply for commissions in the Medical Reserve Corps.

This is an outline of the plan of this department for medical preparedness under existing laws. What will be the result of the present movement for preparedness no man can foretell. What is required is:

1st. A Medical Corps, commissioned and enlisted, of sufficient strength to form a nucleus around which the sanitary service of an army in war can be con-

structed. This requires a personnel much larger proportionately than the present law provides.

2nd. A reserve of officers, enlisted men, trained in peace for service in war.

Training is the one essential for any army, and unless an army is trained in every branch it is fighting under a handicap, and if this necessary training is lacking on the part of the sanitary troops, the usual result—interference with rapid movement of the army due to the fact that the sick and wounded are not promptly evacuated to the base, criticism at home, discontent of the men, unnecessary suffering and loss of life, and as a consequence, a loss of morale, without which no army can hope to succeed in war.

Medical preparedness means the application of efficiency to the conservation of health and life; prevention of those diseases that cause the more or less rapid disintegration of an army, and then coordinating the life saving with the life destroying branches of an army.

This end can be attained only by building up public sentiment, by a campaign of education, forcing the public to realize that very patent fact that an efficient medical corps is an asset of incalculable value, not only to the army, but to the country as a whole; that an efficient medical corps means the conservation of the life of an army, saving to the country lives that would otherwise be uselessly sacrificed and sacrificed because of a false idea of economy, the weighing of the dollars and cents, that an efficient sanitary service costs the government. We need go no further back than the Spanish-American war for an example of the saving of a few thousands of dollars at the expense of several thousands of lives, the lives of soldiers who died in concentration camps.

It is well said that "Success in war is the result of adequate military preparation followed by effective military operation." This axiom cannot be followed if there is a lack of medical preparedness, and we cannot hope for the practical application of the axiom until public sentiment makes its demand. This demand will come up only after public sentiment is educated to realize the cardinal principle, that medical preparedness is as necessary as armed preparedness. This

education can come only through the teachings of the medical men of the United States.

The lack of medical preparedness of the French army has been a matter of concern to the director of the army medical service for years. Requests for increase were refused or grudgingly granted, and then only for an insufficient number of officers to meet the needs of the service. In August, 1914, war began, followed by a breakdown in the medical service. The conditions were similar to those in our own service in 1861-2, and again in 1898. The report of Reinach to the French Parliament is illuminating, and if this report were called the "Dodge Report" it would be a very fair statement of the conditions that existed in the Spanish-American war. The debates in the Chamber by Lachoud, Navarre, and Parou might have been debates upon the floor of our own Congress. The parallel is exact; this report and these debates will be found in the "Official Journal," and are well worth study. The deficiencies in the sanitary service have been corrected, but only after a year of unnecessary waste of life. In the light of past experiences and the example of the lack of medical preparedness in the present war, shall we

be guilty of again entering upon a war unprepared to meet the emergency that must necessarily arise? Shall we waste lives in war in order that we may save in times of peace a few tens of thousands of dollars each year? This can be prevented only by education, by building up a sentiment among the people that an efficient medical corps is just as necessary as an efficient combatant force, and that an army without an adequate medical corps is not an efficient army; that medical preparedness means efficiency and that efficiency should be learned only in times of peace; that the sanitary personnel must be of both the regular service and of the reserve, and in numbers sufficient to perform their duties in war. This education can be fruitful only by the teachings of the medical profession, a profession whose devotion to humanity is recognized and a profession that has no axe to grind. "The Medical Corps of an army is the great conserving agency of a destructive organization. To wage war successfully, the greatest amount of destruction must be visited upon the armed forces of the enemy. For this end is required the utmost conservation of health, energies and life of the army, and to this end the highly trained and specialized medical corps is absolutely essential."

MISCELLANEOUS

EXAMINATIONS FOR THE NAVY.

The next examination for admission into the Medical Corps of the Navy will be held on or about June 16, 1916, at Washington, D. C. Boston, Mass., New York, N. Y., Philadelphia, Pa., Norfolk, Va., Charleston, S. C., Great Lakes (Chicago), Ill., Mare Island, Cal., and Puget Sound, Wash.

The applicant must be a citizen of the United States, between 21 and 30 years of age, a graduate of a reputable school of medicine, and must apply for permission to appear before a board of medical examiners. The application must be in the handwriting of the applicant, and must be accompanied by the following certificates:

(a) Letters or certificates from two or more persons of good repute, testifying from personal knowledge to good habits and moral character.

(b) A certificate to the effect that the applicant is a citizen of the United States.

(c) Certificate of preliminary education. The candidate must submit a certificate of graduation from an accepted high school or an acceptable equivalent.

(d) Certificate of medical education. This cer-

tificate should give the name of the school and the date of graduation.

(e) If the candidate has had hospital service or special educational or professional advantages, certificates to this effect, signed by the proper authorities, should also be forwarded.

Application should reach the Bureau of Medicine and Surgery not later than June 5, 1916.

Successful candidates are appointed assistant surgeons in the Medical Reserve Corps, and if so recommended are subsequently assigned to duty, with full pay and allowances, in attendance upon a course of instruction at the Naval Medical School, Washington, D. C. This course begins annually about October 1st, and lasts about six months. Upon the completion thereof the student officers are given their final examination and, if found qualified, are commissioned as assistant surgeons in the regular Medical Corps of the Navy.

Assistant surgeons are examined for promotion at the expiration of three years' service, and, if successful, become passed assistant surgeons. Promotions to the higher grades are made in the order of seniority to fill vacancies as they are