preservation. Cheap prescription blanks, unattractive blotters or useless publications are really harmful. One must know the needs of a physician and must try to supply these needs in a manner that will be acceptable to the receiver."

In concluding and summarizing, the speaker said:

"I believe to advertise successfully, one must have something to tell, must have something good to tell, and must really believe he has something to tell that will benefit those he desires to serve. If then, he will tell his story earnestly, enthusiastically, and, above all things, truthfully, he will be able to do advertising that will bring profit to himself and give satisfaction to those upon whom it has had effect."

THE NEED OF QUALIFIED PHARMACEUTICAL SERVICE FOR THE AMERICAN SOLDIERS IN THE UNITED STATES ARMY.*

BY FRANK CAIN, M.D.

As the great war continues we grow increasingly conscious of the enormous task before us in providing for the immediate health and safety of the American soldier, which is equivalent to the ultimate salvation of all of us. For the army and the navy are the bulwarks that stand between us and the horrors of servitude. Democracy must trust everything to her sturdy sons hastening to the field of battle. But if this is so we must do all that lies in our power to keep them sturdy and capable of defending us. Already in a thousand directions keen minds are at work with this end in view and constructive legislation is creating the conditions for its realization.

The movement in favor of Pharmaceutical Army Corps is one phase in this general tendency toward constructive national legislation and achievement. To the expert or careful student of such matters, the value and meaning of qualified pharmaceutical service in winning the war is obvious. To the general public, consisting of laymen, even to the educated laymen, this value is not so clear. There are even members of Congress who oppose the Edmonds bill (which authorizes the creation of such corps) on the plea that they are unnecessary; that medicine in handy tablet form can be dealt out by any one. But their standpoint is still that of the laymen and consists largely of mental snapshots taken at the corner drug store or the village apothecary's.

Their knowledge of the pharmacist and his work is frequently merely impressionistic, and uncritical or rather superficially critical, and it may even be drawn from an acquaintance with the pharmacist's employees; the boy at the soda fountain, for instance. It is always unsafe, however, and likewise unjust to judge the finished product by the raw material alone—to estimate the trained pharmacist by the potential druggist. The public is also liable to misinterpret the motive of the pharmacist, in seeking recognition in the Army, believing this to be selfish personal interest, an error which we trust we may be able to dispel.

^{*} Read by the author at the Lloyd Library, Cincinnati, Ohio, June 18, 1918, before official representatives of the Cincinnati Branch of the American Pharmaceutical Association, Ohio State Medical Association, Ohio Branch of the National Pharmaceutical Service Association, Ohio Valley Druggists' Association, Ohio State Pharmaceutical Association, representative citizens and the Drug Clerks' Association.

All this being admitted, we must therefore conduct an educational campaign, nation-wide in its extent in order to convince the public that Pharmaceutical Army Corps are necessary. And we are certain that once the public is shown the facts, it will demand what it has hitherto viewed with indifference or even been unaware of. For the American public, as a thousand testimonials from press, pulpit and every source of popular expression prove, is absolutely sure that there is nothing too good for the boys in khaki "over there," whether it be books to read, food to eat, or medical care for the sick and wounded.

The public then wishes to know why Pharmaceutical Army Corps are desirable. Taking up the question first from the standpoint of abstract justice to the individual pharmacist, we find that he has spent many years in preparing for his profession. Such a man will be efficient, only if placed at his own work. The spirit of efficiency which is coming to guide us in all our activities, dictates that each man be in his proper place, and the general rule covers the particular instance. It should apply to the pharmacist as to the engineer, physician and all others. Again, the pharmacist or student of pharmacy has in addition to his years of apprenticeship spent other years in institutions bestowing a scientific training in his profession. He is, or ought to be, somewhat of an expert in many branches of science. He must be a chemist, physicist, botanist, and an expert in crude and refined drugs, as well as poisons. Is all this training and ability to be thrown away? Would it not be better employed in actively serving the Government?

The ideal of Democracy, in opposition to Autocracy, with its crushing of the individual, is personality in the members that compose it—the ideal of the fullest realization of the powers and capacities of the individual in their appropriate objects. And in his ideal is the promise not only of justice to the individual but of the maximum of social efficiency.

Social efficiency—this after all is the keynote of our desire for the recognition of pharmacy, and the institution of pharmaceutical army corps. Social efficiency to-day means national efficiency, the first prerequisite to the success of the United States in this war, and the safety of the world which hangs in the balance. We could waive all questions of individual justice for pharmacists. The pharmacist has but one desire and that is to serve America. He is willing to serve in any capacity if need be. Letters from pharmacists now serving in the ranks of the United States Army are eloquent testimonies to this fact. All unite in their spirit of eagerness to serve the country with mop and broom, it may be, or with rifle and bayonet at the fighting lines, to the end that Kaiserism may be defeated forever. Nevertheless, they express regret at not being able to contribute their particular skill and training in the interests of their comrades' welfare. wonder if amid so many expressions of pure altruism, a note of personal chagrin creeps in at times, because in the majority of cases the pharmacist is assigned to some duty which has no relation whatever to his profession. While at the same time the dispensary at the very Post at which he is stationed, may be under the supervision of one who is not a pharmacist.

Thus the pharmacist in the Army feels that it is good to serve Uncle Sam in any case, but that it would be much better to be able to serve efficiently. This means in the first place to serve in his chosen line where he knows that he can "deliver the goods" and that no one else can satisfactorily fill his place and, in

the second place, it means actual service as a pharmacist at the front with the fighting men. This would also be justice to all, for after all, Plato's conception of justice as each class performing its special task, each man minding his own business, in a word, performance by those best adapted to perform is as true to-day as it ever was.

Thus from the point of view both of individual and social justice, the pharmacist deserves recognition as a distinct and valuable unit in our fighting forces. We have dwelt briefly on the greater efficiency thus attainable, but it may be well to develop the point.

Success in war is no longer only a matter of courage in the soldiery or strategy and skill on the part of the commanders, or the possession of deadly instruments of warfare, or of all these things combined. Wars are no longer mere contests between the public armed forces of belligerent peoples, while the masses of people on either side look on, more or less passively, or are indifferent, like the philosopher Hegel writing his learned treatises while the guns at the battle of Jena thundered in the distance. To-day entire nations are mobilized against one another. All of the material and spiritual resources of a country must be pooled and organized to successfully resist the foe. It is a contest of efficiency and of morale which is in part at least the result of the consciousness of efficiency.

Now efficiency depends upon division of labor. Historically, increasing division of labor has accompanied progress in civilization and civilization is a function of efficiency in living. The primitive horde in which every man was a "Jack of all Trades" and provided for all his own wants, gave way to the tribe where the arrow-maker, the chipper of flints, the manufacturer of nets, and the medicine man began to specialize on certain phases of the general activity, and so foreshadow a future period of universal mutual dependency, and reciprocal service. All through the classic and medieval periods, division of labor increased and reached its maximum in our modern industrial age of machinery. To-day there are innumerable vocations and professions, each boasting its experts and within each is a sub-division or redivision of labor, so that in such a profession as medicine, for example, there is a multitude of specialists of every kind. This minute division of labor is what makes modern medicine so efficient in contrast with that of the past. Each specialist is enabled to assimilate and apply all there is to be learned in his particular branch.

What is true of the modern world, under the normal conditions of peace, is no less true under the abnormal conditions of war. In fact it is even more essential that each kind of service required should be performed in the speediest and best way—in short, by the man equipped for the specific task—the expert.

If one of these experts, say the physician or surgeon, be compelled to devote his attention to a variety of tasks instead of that for which he is peculiarly fitted, he is handicapped at the start. His best efforts are thwarted because he must scatter his shot. Yet this is just what happens if the physician or surgeon is forced to supervise, or attend to the pharmacist's work in addition to his own, as is the case at present in the United States Army.

Disease has been the deciding factor in many of the great campaigns in history, whether those of a Pharaoh in Egypt, a Hannibal or a Napoleon. It will be recalled that the army of the Assyrian when he "came down like a wolf on the

fold" was stricken by the "Angel of God" and decimated; in short, his army was so afflicted by disease that he was obliged to raise the siege for want of fighting men and succeeding centuries have witnessed similar disasters.

In modern times cases are recorded where regiments were exterminated before they could reach the seat of war, notably in the Crimean war, when in a single six months' campaign, of 50,000 men lost, but 2,000 died of bullets. Again, in the Madagascar campaign of the French in 1894, 7000 out of 14,000 men engaged, died of disease while but 29 men were killed in battle. In the American Civil War a little less than the proportion of 4 to 1 died from disease as against those slain on the battlefield. In the Spanish-American War the proportion was about 11 to 1, for the entire war, and 14 to 1 during the first 100 days. In the Franco-Prussian war, one man died from disease for every two slain in action, while in the Russo-Japanese war the oriental armies lost but one man from disease to every four killed on the firing line, the best record yet made and one attracting universal attention, which is proof of the great value of a scientifically organized medical department, which includes Pharmaceutical Corps.

To-day Germany claims that 87 percent of her wounded are returned to service, a fact which partly explains why Germany still has a huge army despite tremendous losses. The Germans have been fortunate enough to retain their own wounded as a rule, and these were generally restored to active service. The Allies must achieve the same results, in the treatment of sick and wounded, or our potential numerical superiority will not avail us in the struggle. Fortunately, however, our own record compares very favorably with that of the enemy. Surgeon General Gorgas recently announced that 80 percent of the American wounded will be restored and returned to service again, while only 10 percent will be permanently disabled. This shows that remarkable work has already been accomplished. But the fact that the whole burden of this great work is thrown upon the physicans and surgeons, results in a constantly increasing call for more doctors in the Army. A noted surgeon, Dr. McLain, speaking recently before the American Surgical Association, in Cincinnati, was quoted as saying that "every available doctor in the country might be called to military service before the present conflict ends." But it is clear that our success in the war would not be furthered by sending every physician abroad. Who would then care for the health of the workers at home? "We ought to have enough physicians to care for the Army's sick and wounded and for the really vital needs of the army and civilians at home at the same time.

It is plain that the doctors of the Army need and would welcome assistance, and what more welcome assistance could be afforded than that of an organized corps of competent pharmacists who, by relieving the doctor of numerous labors of preparation, analysis and supervision, would restore the normal division of labor to which he is accustomed and permit his concentrated attention to his specific task?

This arrangement, moreover, would have the further advantage of preserving and augmenting the pharmacist's professional skill, so that he would be a more efficient member of society upon his return to civil life after the war. The conservation of professional skill is a part of the general conservation of the country's resources. At present the reverse is true. The pharmacist who goes

to the trenches may have no opportunity for several years to practice pharmacy, or keep up with its progress. As a consequence, he is likely to come out of the war "a back number." The creation of new skill is always more difficult than the maintenance of what we already possess.

The arguments thus far advanced seem to us amply sufficient to convince any one that the pharmacist has a definite and necessary place in the U. S. Army. For the sake of completeness, however, we touch upon a few other points generally referred to but which bear repetition. In the first place, it cannot be too much emphasized, that laws in every state of the Union require legally accredited pharmacists to dispense drugs. Laymen are not permitted to do so lest the citizen of the commonwealth suffer thereby.

Shall those on whom the hope of the world depends—the soldiers of the United States Army have inferior service in this regard? There can be but one reply. Not inferior, but even superior, service if possible. The men and women at home would demand it if they conceived the problem clearly. The soldiers themselves have no time to ask it or even think about it. Their one thought is to give efficient service as soldiers. The motive of patriotism effaces self. But we who are at home can clearly see their needs, and it is our social, our patriotic, our Christian duty to provide for them.

In the second place, the dispensing of the numerous poisons specified in the official drug table of the U. S. Army—there are some 200 deadly poisons among them—must be in skilled hands. In a war with an unscrupulous enemy resorting to poison gases, and the poisoning of water supplies and food where possible, adequate knowledge of the treatment of poison by antidote and antagonists should be possessed by those dispensing drugs as well as army physicians.

Finally, the example of our European Allies, as well as that of our enemies, should impel us to the establishment of pharmaceutical army corps. Germany has a splendid organization of the kind, with military pharmacists of a number of orders of rank. We must fight fire with fire, like the pioneers of the western prairies, and match Germany at her own game, here as elsewhere. England and the United States who lag behind in this respect, must establish such corps to coöperate properly with their great French ally who considers their Pharmaceutical Corps indispensable.

If the reader finds himself wearied by what he may call truisms, or by restatements of things he already knows or fancies he knows, let him remember that all good things bear repetition. It is only by repetition that we learn that most essential of all essentials in education, the letters of the alphabet. And the alphabet of the nation's needs, in which pharmaceutical army corps is one of the letters, like any other alphabet, must be thoroughly learned before we can spell out a speedy victory.