That the preparatory and professional training time for pharmacists must be increased if we hope to hold our own with other professions cannot be denied. Whether more time should be given to liberal training or to added professional courses is becoming a question of paramount importance. This is made especially evident by the recommendation of the above mentioned committee.

We wish to make it clear that we recognize the value, force and dignity which the Ph.G. and Ph.C. degrees have had and what they stand for. No possible action on the part of any body in the future can in any way detract from or diminish the value of the degrees already conferred. But, if, as we have supposed and which now appears possible, a degree shall be defined as consisting of nothing less than four years of college work, then unless these degrees would represent the same amount of training their value is bound to deteriorate. It is on this basis that we would finally be forced to urge the substitution of a certificate for a diploma.

## THE TRIPLE ALLIANCE IN MILITARY MEDICINE.\*

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The domain of Military Medicine is a blend of three major components or subjects: medicine, dentistry and pharmacy, with sanitation and hygiene essential factors of each; veterinary surgery is a branch. As to which one of these three departments of human welfare effort shall be esteemed paramount, there may be justifiable variants of opinion. There can be no question but each is on a practical par with the others in the objects they aim to achieve.

The first line of defense is the Medical Corps, for the reason that they pick the figting men as no others can. Without this critical selection there would come together a mere herd of dubious candidates—most expensive by reason of potential defectives and dependents. The second line of defense we may safely claim is also that of the military surgeons because theirs is the responsibility of putting these men in conditions of highest efficiency, of keeping them there, of forefending them from all preventable decrepitudes, of repairing them when damaged and of restoring them to the trenches, of reducing to a minimum their dependence upon either the Government pay rolls or the public charge. Can you beat that for a man's sized contract?

In the process of preventing the preventable depreciation of life and vigor and fighting power, the Medical Corps must qualify as ceaselessly vigilant, first-class experts in testing all suspicious objects, sources of lurking perils among which are drinking water, foods, soils, infective agencies, environments, climates, dwelling or sojourning sites whether outdoors or indoors or in a ship. There is included demand for expertness in chemistry, in bacteriology, in all the departments of clinical laboratory proficiencies. The time and strength and multi-

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tudinous demands made on the surgeon, notably in time of active participation in war, bring him to the verge of over-strain and then he absolutely must have expert help because he cannot do it all and act as administrator besides.

Frankly, the development of Military Medicine has long outgrown the archaic and wholly unsatisfactory methods and practices of even as late as 1898 and demands complete readjustment in certain particulars.

The one outstanding deficiency is in the domain of expert pharmacy. All demur, all hesitation to supply full quota of modern pharmacists, can be met by making clear what he is now uniformly trained to supply; viz., expert knowledge in physiologic and pathologic (medical) chemistry, proficiencies in laboratory tests of urine, feces, gastric contents, of blood, Wassermann, Widal, and transfusions of blood, intravenous treatments, surgical dressings and diverse allied subjects and facilities; also examination of drinking water, foods, soils, localities, drainage, details of sanitation, also in diverse clinical laboratory manipulations, at least as to details of matters to which the surgeon may be wholly unable to do justice.

There is therefore fullest justification for a triple alliance between surgeons, dental surgeons and expert pharmacists; otherwise the practical efficiency of the fighting, the executive and the financial personnel must indubitably and seriously suffer.

The Temple University was the place and Dr. Sajous the man who devised and organized a plan, now in operation, of a Triple Cadet Organization of medical, dental and pharmacy students officered by members of the faculty.

The status of pharmacy as a profession in this country lac s much of what it deserves largely through the neglect or apathy of the profession of medicine and one reason is the crass commercialism which still lingers in her territories. Now pharmacy is just as much a profession *per se* as any other high-class industry progressing on a plane of lofty ethics and strict scientific conditions.

Pharmacy is as full a correlate of medicine as is dentistry or veterinary surgery, and her proponents are qualified to enjoy full recognition of the military and other bureaus. And yet to-day the medical profession, or corps, in the military service, fails to give scientific pharmacy that just encouragement and support essential not only for its best growth and development but also acting as the cordial handmaid, contributing to the solidarity of medicine as a whole.

Not more so-called pharmacists are needed in the service, but *real ones*, trained in the full scientific, as well as practical methods now demanded of students in the better schools of pharmacy. Indeed the use of drugs has notably diminished of late because of the increasing efficacy of preventive and reconstructive measures.

The number of drug stores, apothecary shops or pharmacies are rapidly becoming more numerous than needed, yet they are of much use and the proprietor must live, hence the temptation to deal in nostrums and blatantly overpraised objects correlated with remedies. The correction of abuses, it would seem, might be effected by a greater sympathy and mutual appreciation of the domain of each, especially when the pharmacist is called upon more to exercise his skill as chemist, analyst, laboratory clinician and in other ways to coöperate in the day's work of the physician. The scientific spirit among pharmacists is absorbing attention, devotion and increasing personal sacrifices with great speed and force.

My interests in therapeutics are in other measures than drugs, yet for years I have been impressed by the splendid research work that the American Pharmaceutical Association has been doing for our benefit, quietly, unobtrusively, honestly and practically unknown to the medical profession. This is set forth candidly in the annual report on the Progress of Pharmacy and in its exceedingly able Journal; also the research work of the splendid American Journal of Pharmacy for nearly a century past; these publications embrace thousands of pages of scientific matter better known and appreciated in foreign countries, I believe, than it is in our own.

It seems to me that the time has come for full correlationships in which the medical profession should do all in its power to get shoulder to shoulder with sister professions. The first step could well be that advocated by the *Journal of the American Medical Association* when it urges the recognition of pharmacy as a profession by the Medical Department of the U. S. Army and Navy. Such a recognition would go a long, long way toward placing the practice of pharmacy in this country in a satisfactory position to the world to demonstrate its effectiveness.

What stands in the way? Apparently, the attitude of the Surgeon-General of the Army who has expressed himself as opposed to the recognition of professional pharmacy in the Army as being "unnecessary" and second, that if recognized it might necessitate the manufacture of medicinal preparations by Army pharmacists, and this would "offend" the large manufacturing pharmacists of the country who furnish the medical supplies. The Surgeon-General is a man of deep penetration; in this instance, however, he has not given the subject the attention it deserves; when he does, he will be more liberal and appreciate the present status.

It is claimed little or no place exists in military medical practice for the use of drugs, that the vital issues are surgical and sanitarial, and that drugs "if" (or when) needed, can be met by the use of "ready to use" products, tablets and the like, conveniently handed out by physicians, or by privates with little or no special training.

The answer to this is, of course, that proper results in clinical work cannot be attained without proper and adequate tools. One might as well urge that the Army surgeon should use "First Aid Packets" only in the surgical handling of the wounded, as to say that the military surgeon should be supplied only tablets for the treatment of diseased conditions.

The men of the trenches, God bless them, are entitled to the best possible pharmaceutical skill as well as other skill when ill, fully equivalent to what is available in civil life. Less than this is rank injustice or worse.

In normal times the fighting man, it is true, requires little medical treatment, and, also, probably during the first year of war, but when the bodies of our boys are wrecked and being repaired surgically, however skillfully done, disease conditions supervene. In a short time all Army hospitals will be filled to overflowing, not only with surgical, but also with medical cases demanding highest medical skill to reclaim. Why then should not our men have the best pharmaceutical skill to make more effective the medical skill?

So far as the second objection of the Surgeon-General is concerned, Editor Mayo, of the *American Druggist*, is in the right when he says there is no foundation for the fear expressed of venality. The first-class manufacturing pharmacists

of this country are as patriotic as any other group. The amount of Government business they receive, in comparison with their general and regular business, is exceedingly small. It is more than probable that the Government contracts afford them negligible profits. They might be glad for relief from the business. Their services and their products are offered not for revenue only, but from patriotism.

I need only mention here the enormous assistance that the pharmacists as now taught and trained could be to medical men not alone along pharmaceutical, chemical, toxicological, bacteriological, but in X-ray and other lines. I have emphasized this in a paper published recently in the New York Medical Journal.

H. R. Bill 5531 introduced by Representative The Hon. Geo. W. Edmonds, of Philadelphia, in the House of Representatives on July 25, 1917, is an excellent and important one, and I believe that this Bill covers the field comprehensively and creditably. Doubtless it may need amendment in technical miltary details to meet the needs of the Army and Navy.

I express the hope and believe that the "brief" filed with Surgeon-General Gorgas by the pharmacists on August 10, 1917, will receive sympathetic attention. This extraordinarily able official could perform no act of public service more to the benefit of the medical department and his credit than the recognition of skilled, highly trained professional pharmacists, by supporting H. R. 5531 as an administration measure. His predecessor, Surgeon-General Torney, had established the Dental Corps and the Veterinary Corps. It would be peculiarly fitting if Surgeon-General Gorgas could have established the Pharmaceutical Corps.

## SPECIAL CENSUS OF COAL-TAR PRODUCTS.

Section 501 of the Act of Congress dated September 8, 1916, provides for the taking of a special census of the production of intermediates, dyes, and other coal-tar products in the United States. The act provides: "If, at the expiration of five years from the date of the passage of this Act, the President finds that there is not being manufactured or produced within the United States as much as sixty per centum in value of the domestic consumption" of intermediates and dyes, medicinals, and other finished products, "he shall by proclamation so declare, whereupon the special duties imposed by this Section on such articles shall no longer be assessed, levied, or collected." The President has requested the Tariff Commission to undertake the collection of information necessary for the exercise of this power.

The Commission is preparing for a systematic census of the production of all coal-tar products in a broad sense, including intermediates, dyes, medicinals, flavors, photographic chemicals and synthetic phenolic resins.