

## COMMENCEMENT.\*

For a long time I did not know what the term "commencement" meant. I took a personal part in a commencement at the end of my grammar school course, in another at the end of my high school course, in still another at the end of a business course and in three others at the ends of three collegiate courses. Not until the time of the commencement at the end of my first collegiate course did I really understand what the term meant. No one had explained it to me before and I had not given the term any special thought. Because commencement always came at the end of a course, I took it that the term was a sort of formal one describing the usual functions attending the end of a course of study. It did not occur to me at the time that the end of one thing was the commencement or the beginning of something else.

This occasion is a commencement. It also comes at the end of a course; your course in the College of Pharmacy of the University of Illinois. If the term "commencement" is a correct one, then it should mean what it designates. And it does. It is a commencement—a commencement of what? It is the commencement of a very important if not the most important period or era in your lives—the commencement of your professional career; the commencement of that period which will determine your success or failure in life, your usefulness or the reverse to yourselves and to your fellows; the period in which you first are released from the guidance, direction and discipline of your teachers and in which you are thrown upon your own resources, are left almost wholly to your own ambitions or lack of them; the period in which the responsibilities of others in you cease very largely or altogether; the period in which you assume greater duties, privileges and responsibilities than ever before; the period in which you will begin to realize or fail to realize the ideals which it is fair to assume you have already formulated and cherish; the period in which you will succeed or fail in applying the teaching and training you have enjoyed; the period, in short, in which each one of you enters the arena of life and the estate of full membership in your calling and in society. This occasion is therefore the commencement of the critical period of your lives.

I regard it as a distinct privilege to have the honor of addressing you at the beginning of this serious time in your lives. You will pardon me if I record that this is my twenty-fifth commencement address. Twenty-five times now I have had the good fortune to speak to young men and young women of the great opportunities and privileges of life. It is also my good fortune to have the knowledge that many of the things I have said and advocated on occasions like this have led to a satisfactory fruition in the subsequent lives of many young entrants upon our beloved calling. On all of these occasions, except one, I have spoken extemporaneously and informally, usually because of lack of time to commit to paper the thoughts that the occasions suggested, but at last I have found the time, or, to state it more correctly, have made the time to put into more permanent form one of the messages I have to graduates.

## WHAT IS LIFE?

Let me ask: What is life? First, it is our most precious gift from on high. It is our most precious privilege and opportunity. We have heard it said, "The

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world owes us a living." Not so! Not so by any means! Each one of us owes the world our life. We are in debt for our lives and our first and foremost duty is to recognize this debt and to discharge it. It takes a lifetime to discharge it. Look forward! What shall we say in the balancing of accounts "when the summons comes to join the innumerable caravan"? Shall we then look back with regrets or with rejoicing? You are to determine upon the affirmative answer now if you have not already done so. Your preparation begins now, at this moment, and it should continue with every moment while you are here on this mundane sphere. You are in the onward rush of life and you cannot afford not to improve every single moment. Every moment rightly and unselfishly used helps to balance the debt of life you owe the world and your fellows.

#### THE LAW OF BALANCE.

In this connection let me bring to your minds as forcibly as I can the law of balance. Meditate upon this law. Read the Scriptures of all races and of all civilizations upon this law. This law is variously stated but its principle is the same, unchanging and eternal. One version is: "Do unto others as you would have others do unto you;" another: "As ye sow so shall ye reap;" another: "Cause and effect are eternally inseparable." It is also called "The law of compensation" and "The law of action and reaction." Divine teachers, philosophers, poets and more humble folk have recognized and expounded this law in all ages. It is fundamental, immutable and inviolable and from it there is no escape. It is a spiritual and a moral as well as a natural law. It is divinely appointed for your benefit and mine. It reigns supreme, but it is just. By its virtue you are the centre of your world, the creator of your worldly success or failure; of your environment; of your development or the reverse. By it you are your own judge; it recognizes no chance or luck or accident; by its wise employment you grow and prosper and gain power; ignorance of it accounts for all the negative conditions of life; by it you overcome temptation and thus gain the power the temptation had, or you are overcome by temptation and lose power and strength by that much; by your choice and by its operation you become selfish or unselfish, wise or foolish, self-reliant or dependent, gentle or brutal, tolerant or critical, cultured or coarse, beloved or hated, industrious or indolent, healthy or ill, free or fettered, master or slave, creditor or debtor, strong or weak, humble or proud, respected or despised, inspired or dull, illumined or deadened, brave or cowardly, victorious or defeated. By this law Emerson's statements, "The one base thing in the universe is to receive favors and grant none" and "The benefits we receive must be rendered again, line for line, deed for deed, cent for cent, to somebody in some way," become clear. By this law, in short, you become the beneficiary of the priceless means of largely shaping your destiny.

If this law is true, and it is, men and women are its trustees and administrators; hence what a wonderful thing a human being is; how wonderful and inexpressibly great is its endowment! Its power is greater than that of any other of God's agencies. Have you ever realized how divinely endowed you are for self-help? Think for a time on this. Think of the scope and breadth and magnitude of human achievements and human institutions. Think of what man has accomplished by the conscious and unconscious employment of the law we are discussing. Each of you will then realize as a member of the brotherhood of man how indescribably great are the capacities and powers inherent in each one of us. This realization will force upon us the conclusion and conviction that we are bound to

dedicate our lives to the greatest privilege in the world—affirmative, helpful, efficient service to man and hence to God our Father and the Author of all.

Commencing with this realization and conviction and with the dedication of our powers, our work and our very selves to this service, our usefulness in the world and the outcome of our lives and careers cannot be in doubt.

#### HOW SHALL WE PROCEED?

Now coming to the concrete and specific, by what formula or direction shall you proceed? You have had, I take it, an adequate training in the theory and practice of pharmacy. I will not review the technical, professional training you have received. The personnel of the faculty which directed your study deprives you of any excuse of insufficient information or training in the technic of your calling to enable you to begin that period of your development in which you are to apply your theory to practical and useful ends. But having studied diligently and industriously you have not yet done your full duty. I am in full accord with Epictetus, who says: "Do you think I shall call you industrious because you pass your nights in studying and reading? By no means. I must know what is the object of all this study. If you are working for glory, I call you ambitious. If you are working for money, I call you avaricious. But if you study in order to cultivate and form your reason, to accustom yourself to obey the laws of nature, to fulfil your duties, then only will I call you industrious; for that is the only labor worthy of a man."

#### A UNIVERSAL PRESCRIPTION.

Mere study and the acquisition of knowledge and information is not sufficient. The formula includes many other ingredients. You have dispensed some medical prescriptions and will dispense many more. The prescription I will give you is not such a one and will require your lifetime to dispense. The prescription is this:

℞. The measure of a life time of efficient and loving service to your fellows.  
Dispense according to the art of living.

It appears at once that this prescription can be compounded by anyone whether a pharmacist or not who lives a reasonable length of time. All men and women, whatever their walks in life, ought to fill or ought to endeavor to fill this prescription. They are compounding some sort of a life. I mean to imply that it is the duty of the pharmacist to live commensurately as full and useful and affirmatively and beneficently serviceable a life as anyone. The ingredients of the prescription are the same whoever compounds them and they are as free and universal as the air and sunshine. They may be appropriated *ad libitum*. They should be compounded according to the directions: *misce secundum artem vitae*—compounded not according to the art of pharmacy but according to the art of living, for life is an art; some say it is a fine art. You are skilled or soon will become skilled in the art and science and practice of pharmacy, but you must also become skilled in the infinitely greater and more universal art of living rightly. Pharmacy is only a part; life is the whole, or at any rate, a greater part. This life may be a preparation for an immeasurably higher activity, as your college years have been a preparation for your coming larger mundane life. Who knows? It would be only natural if it were so. This prescription, then, is to be compounded according to the rules of the art of living and of wisdom. What are the important ingredients? Some of them come to me in the following order: honesty, integrity and morality, intelligence, self-reliance and good character, faithfulness, earnestness of purpose, industriousness, perseverance, patience, kindness, generosity, tactfulness,

courage, energy and promptness, accuracy and thoroughness, method, wise economy, resistance to temptation and evil, good manners, refinement and culture. Above all these I place godliness, cleanliness, love, hope, faith and charity.

I have called these components "ingredients" to remain within the idea and figure of the compounding of a prescription but in reality they are *qualities*; qualities inherent in all of us, and qualities more or less dormant or active in each of us according to our respective degrees of development and which in their totality constitute *character and capacities*, and these latter all thoughtful and wise persons cherish most highly and seek ever to develop more fully.

#### THE WORLD IS A LABORATORY.

Where shall these ingredients be compounded? Shakespeare says, "All the world's a stage." This gives me liberty to say, "All the world's a laboratory in which life is in the compounding." Wherever we may be or whatever our circumstances may be we all are in that vast laboratory and in it we can compound largely as we please, subject to the law of balance we have already discussed. It is our privilege to choose either wisdom or ignorance as our guide. If we choose rightly we make of the law of balance a law of success and make of the world a vast agency of success. Because success is in the nature of men and things, the right compounding in this world's laboratory is not at all difficult. Most of the difficulty is overcome in the recognition of the possibility of developing the ingredients I named *in our own selves*. The quantities of the ingredients and therefore of their product depend upon their development within our own selves according to our volition, willingness and determination.

In your course in pharmacy you learned much about the ingredients of medical prescriptions. Time will not permit me to tell you all about each of the ingredients I mentioned as entering into the universal prescription I gave you and at which you will continuously compound during your lifetimes, but I can and will tell you something about some of them.

I mentioned first *honesty, integrity and morality*. There is a voice within us whose counselling we should regard. I mean our conscience. It is the tribunal which decides for us unfailingly; it approves or condemns. Our moral sense decides for us between right and wrong, between lawfulness and unlawfulness. It is our supreme court. Its decisions are infallible and instantaneous. We should not deny the dictates of our conscience; rather should we appeal to the voice when it is silent. If we follow it we will of necessity be moral and honest. We should be honest not simply because Franklin or someone said, "Honesty is the best policy." That would be utter weakness. If we were honest only because it seemed politic to be so our honesty would not be trueness. We would then not hesitate to be dishonest if it seemed politic for us to be so. Let us be natural; it is natural to be upright, moral, honest, and unnatural to be otherwise. In whatever we do we should have the approval of our conscience.

#### SELF-RELIANCE.

The next ingredient I mentioned is *self-reliance*. The self-reliant are their own sufficiency. We ought to rely first upon ourselves—"Heaven helps them who help themselves." We have largely the power to be what we will to be. The sum of the experience of men points to self-reliance as the greatest factor in the success of the individual; and the success of the individual becomes that of the nation. Reliance upon others is an indication of weakness and is enfeebling; reliance upon one's self is invigorating and stimulating. If we need the help of others, we should

seek the guidance, and perhaps government, of those only who are mature in experience and wisdom. Growth and progress are best insured by the exercise of our inherent powers. We should rightly appreciate our powers and cultivate and develop them. All really great men have become such largely through the perception and development of their own powers. Knowledge and conviction of our inherent powers stimulate us to attempts which we would not otherwise make. To be self-reliant we must recognize the powers naturally ours. We must do for ourselves, and above all we must think for ourselves. We must be able to respect ourselves. Let us look to the culture of our character as well as to the development of our intellect and skill. It is folly to rely upon institutions or persons to do this for us. The institutions of men, educational, governmental, social or business, can give us no active aid. The best they can do is to stimulate us to help ourselves. But if our self-reliance has led us to success, as it must, we must not permit our independence to make us haughty or arrogant. We would then have descended from our lofty pedestal of wisdom to the depths of vain pretension.

#### INDUSTRIOUSNESS.

*Industriousness* is another essential part of the prescription. Let our industriousness be well-directed. Self-reliance cannot be practiced without industriousness. Industriousness has built empires—with it we can build ours. Wisely directed industriousness lands us in the haven of material prosperity. Nor should it deprive us of pleasure and enjoyment—these are concomitant with industriousness and are its offspring. While we should be industrious, we should never drudge. We surrender our claim to wisdom if we drudge. Nor should we fuss or fidget or dawdle. We can never afford to be so extravagant with time. Time is Nature's stock, and it is our capital. We must learn to appreciate the value of time, to improve its moments. A lifetime is a vast aggregation of moments. Napoleon said that every lost moment gives an opportunity to misfortune. Moments demand to be rightfully used.

Industriousness does not mean constant work or occupation merely; it means wise and judicious employment of moments, hours, years, lifetimes. Let our application be of the kind that is fruitful. Never should we debase our powers by putting them to unprofitable, unremunerative, unavailing, dishonest, vain or useless employment. To be industrious with healthy, profitable pursuits is to become trained and disciplined as you could not become by any other agency. The element of progress for both the individual and the State is fruitful, congenial industriousness. I would rather that you have a hobby than that you be idle, but make your hobby bring you entertainment or instruction, or both. Successful careers depend upon judicious industriousness.

#### PERSEVERANCE.

*Perseverance* is another of the primary ingredients. If our purpose is just and wise, we should pursue it to the end. If we are self-reliant and industrious, we must as well be persevering. That fortune is usually the reward of the industrious disproves that fortune is an accident.

Industry through the quality of perseverance ripens into prosperity. Perseverance is a quality to be cherished. If we have it not, we should acquire it. We should persevere until we will have acquired perseverance. With it we overcome, without it we are overcome. Continuity of application to a just and worthwhile purpose gives success its birthright and makes failure impossible. We need

not be geniuses to become successful. Genius annihilates time in acquiring, doing and accomplishing. Given other equal qualities, perseverance will do what genius does—only it needs more time. Some geniuses have developed through perseverance and application, but the world does not then call them geniuses. You can become a genius by the slow process, employing the agency of perseverance. Newton worked out his discoveries “by always thinking unto them.” Kepler brooded with the whole energy of his mind upon his subjects. Watts and Stephenson taught themselves chemistry, arithmetic and mechanics during their leisure moments. Their perseverance gave us the steam engine and the locomotive. Had Columbus been less persevering and persistent, civilization might not now have America. Scheele, Priestley, Dalton, Davy and millions of others benefited themselves and the world by their persistent application to purposeful ends. An assiduous cultivation of knowledge and of skill is a solvent of most obstacles. Accident and so-called blind fortune are not breeders of success; wise and persistent industry and faithful application are. Let us resolve that not a day shall pass in which there will not ripen a fruit of our perseverance. The limit of our accomplishments and achievements is measured by the limit of our painstaking and perseverance. Excellence is the end of perseverance.

#### PATIENCE.

*Patience* is another ingredient that we must compound into the prescription of life. Patience is a conqueror. There is this difference between perseverance and patience: the one is active, the other passive. Perseverance is continuous *doing*, patience is continuous *waiting*. He who sows must wait in patience for the harvest. Impatience never hastens nor accomplishes anything. Patience is the power that awaits results calmly, cheerfully, hopefully. Patience is an exhibition of faith in the order of things. The wise are patient in all things. Patience waits, overlooks, excuses, forgives, composes, endures; is not hasty, nor provocative, nor revengeful, nor uneasy, nor discontented. Patience is unselfishness, sacrifice, liberality, generosity, magnanimity. To know how to be patient is to know how to overcome.

#### KINDNESS.

*Kindness* is another ingredient. True kindness is voluntary. Conduct toward others is the criterion by which men are judged. Courteous behavior brings pleasure and regard. Respectfulness, civility, politeness are good qualities to possess, but kindness is their superior. They spring from the intellect, kindness from the heart; they may be artificial, feigned; kindness is always natural and sincere. Kindness is voluntary, spontaneous; it succors, relieves, sympathizes, pleases, supplies. Kindness creates good feeling, gratefulness, happiness. It springs from the deep recesses of the nature in which love has its origin. It gives and expects no return. Kindness is benevolence, charitableness; it is good-will to all. Kindness elevates, refines, dignifies; abolishes rudeness, vulgarity; establishes harmony. If you are kind to others you are kind to yourselves. Be not sparing with your kindness.

#### TACTFULNESS.

Of the ingredient *tactfulness* let me say: The tactful precede action by inquiry. To be diplomatic is to be superior. He who has tact has a faculty whose exercise brings harmony. Tact discerns, discriminates, selects the best. Tact knows what and when and how to do. Tact adjusts, constructs. It is the means whereby to remain out of avoidable trouble. It is the exercise of common sense. Diplomacy.

is cleverness, quickness, sagacity in dealing with your fellows. Diplomacy adjusts what temper would upset. It wins by peaceful means. If our adversary must be overcome, let diplomacy be the weapon of our defense, but let us use it honestly. Let our victory consist in convincing our adversary of his error. Tact never offends. Diplomacy seldom fails.

#### COURAGE, ENERGY, PROMPTNESS.

Among the ingredients I mentioned *courage*, *energy* and *promptness*. The courageous inherit the world. Audacity is not courage. The stimulating quality of courage never disappoints. Courage grows out of conviction and knows not fear. If we are convinced that we are right, we should proceed upon our purpose, but let us make no error as to the quality of our conviction. The quality of conviction must be single, must be sure. We should be courageous not spasmodically, but continuously. That strength of mind that enables man to encounter danger with firmness is not the only species of courage. There is another kind—the kind that is the source of patience in enduring, of forbearance under injury, and of magnanimity in all conditions of life. The former is valor, the latter fortitude. Let us cultivate both and exercise them as occasion may necessitate, but without complaining.

Active *energy* is akin to courage. Courage without energy may fail ere its purpose is fulfilled. Our energy should insure the continuance of our courage. Energy gives emphasis to purpose; it is our inherent power of vigor, strength, force and life. To be without energy is to be enervated, weak, feeble, effeminate. If we allow our energy to lie dormant, latent, we are unardonably wasteful and foolishly extravagant. If our courage and energy have led to resolutions, let action follow swiftly. Promptness is never behind time. The courage that begins to-morrow when it should set to work at once dies of inanition ere the morrow comes. Promptness is quickness of action following decision—it is recognition of the value of time. Our promptitude should not be only of the kind that stimulates our courage into quick operation in the suddenness of vicissitudes, but it as well should characterize our behavior in the execution of the many little things that come to us for administration. Courage, energy, promptness, are rapid means with which to overcome.

#### ACCURACY AND THOROUGHNESS.

*Accuracy* and *thoroughness* are among the primary ingredients I mentioned. Accuracy is permanence. The result of thoroughness is perfection. One cannot be accurate without being thorough. Accuracy leads to permanent results. Thoroughness is a parallel means to the same end. Accuracy is precision, correctness, nicety, without which the practice of any vocation is failure. Inaccuracy is error and serves no purpose. Take time to be accurate. Thoroughness is completeness, reliableness; it is something to be depended upon. It is not halfness, but wholeness. Things worth doing at all are worth doing accurately and thoroughly. The doing of things not worth doing thoroughly is often waste of time and energy. Superficiality never leads beyond the obvious and apparent; it never penetrates. A little knowledge of an exact nature is invariably more valuable for practical purposes than a smattering of much. Be accurate in your speech, your methods, your doings. Accuracy and thoroughness are the roadways to profundity.

#### METHOD.

Concerning the ingredient *method* let me say: To be methodical is to be wise in the manner of doing. To be executive is to be wisely administrative. Man is

born to have dominion. His dominion makes of him an executive, and if he fails in wisely administering the affairs of his life and condition and vocation he becomes dominionless: a sorry spectacle to behold. Direct and execute your affairs wisely that you may prosper. Wisdom is many things—it is the employment of method in the manner of doing. With method there is order, without, confusion. Method is wise economy. Method facilitates.

#### WISE ECONOMY.

The ingredient *wise economy* is worth a line or two: Economy in all things is wisdom. Economy does not mean to undergo privations to save and hoard money. That is blindness and extravagance called parsimony. Economy is wise management, judicious regulation and competent government of our affairs and things. It not only includes a prudent and conservative management of all means whereby money and property are obtained, but also a judicious application of talent, knowledge, skill and time. Economy increases money by spending it to advantage; it demands a fair return; it incurs no waste. We can afford to be economical in an extravagant way. It is the only kind of extravagance we should not deny ourselves. Economy delivers from helplessness, from dependence. To be economical with our time is to fill our moments with profitable industriousness; to be economical with our dollars is to use them judiciously and in a way that will make them bring us competent return. Economy saves and produces.

#### GOOD MANNERS AND REFINEMENT.

The ingredients *good manners* and *refinement* should not be overlooked. Our manners and our culture are our proclaimers. Our manners are our colors by which we are known. They are our showing-forth; the measure by which we are judged. Manners define the quality of our conduct; they exhibit our way of deportment. Our manners should interpret civility, courteousness, decency, respectfulness, and natural dignity in work and play. Our manners are our true portraits. The manners that we possess should have the qualities of culture and refinement behind them. Culture is inherent; manners are its expression. The one is subjective, the other objective. Culture begets manners. He who has good manners is always at his ease. The mannerly find open doors.

#### TEMPTATION AND EVIL.

I will next remind you of the necessity of *resisting temptation* and *evil*. There is much of the negative in the world. We are often tempted to do what upon reflection our conscience will forbid. Our character and our fortitude are often sorely tested. It is easy to yield, but think of the regrets and the remorse that will surely overtake us. It may take years or a lifetime of remorse and possibly of suffering to balance a temporary wrongful gratification of the senses. We should ever remember that the penalty is certain to follow the infraction of the moral law, as effect is certain to follow cause, but we should resist evil not merely for fear of consequences but rather because the high standards and ideals we have set for ourselves prompt us to have nothing whatever to do with evil. By the fixing of high ideals and a firm determination to realize and maintain them we can shut out from our lives all evil and degradation.

#### SUPERIOR QUALITIES.

For *godliness, cleanliness, love, faith, hope* and *charity*, I refer you to the Scriptures of the world. We should ever bear in mind our divine origin and our



duty to our loving Father to whom we owe all our blessings. By recognizing the brotherhood of man and the Fatherhood of God we can direct the compounding and the living of our lives as our Master would have us do.

#### CONCLUSION.

In conclusion let me say: If you aim to be true men and women in the fulness of perfection you must be true to yourselves, true to your neighbors and true to your God. There is a power within you that is your means. Through it each one of you should strive toward a *personal nobility*. You are endowed with faculties that are capable of creating for you things that are greater than you have ever dreamed of; but they need development, training and application. There is hardly a limit to the possibility of achievement. It matters not what vocation you follow; the possibilities are the same. Start from wherever you are. Your best thoughts and actions wisely and willingly carried out will find for you the place in the ranks of men in which you can be of the greatest usefulness and service to your fellows, and that is a fortunate and beneficent destiny short of which you should not be satisfied: an earthly destiny which I most sincerely wish for all of you.

### THE EARMARKS OF A GOOD EXAMINATION QUESTION.

BY C. B. JORDAN, PH.C., M.S.

The preparation of a good set of examination questions is not an easy task, and it is especially difficult for members of State Boards of Pharmacy, because they have to cover a whole subject with a few questions. The difficulty that here confronts the board members is well understood by teachers, because they are meeting it day by day in their work. The writer fully realizes the difficulty of the task and sympathizes with the one who has it to perform, therefore this article is not written for the purpose of criticising board questions, but with the hope that it may contain some helpful suggestions.

To my mind there are several requirements that a question should meet in order to be a good examination question, to wit:

1. Questions should be definite.
2. Questions should be practical.
3. Where possible they should test reasoning power rather than memory.
4. They should not be questions the true answers to which are impossible with the data given.
5. They should not be questions that can be answered by "yes" or "no," without explanation.
6. They should not suggest the answer.
7. They should not contain or imply an incorrect statement of fact.

The question should be definite: When a question is presented to a hundred different applicants, there are a hundred different minds interpreting it in a hundred different ways, if this be possible. All teachers have been surprised by incorrect interpretation of their questions by students who have been under their personal instruction and who were familiar with the ground to be covered by the examination. This is much more likely to be the case when a question is presented to applicants who are strangers to the examiner and are therefore unfamiliar with his method of asking questions and not acquainted with the ground the examiner wishes covered by the question. For this reason a question should be asked in such a way that there *can* be but *one* interpretation of it.