mercial Pharmacy" as a whole when its various subdivisions were approved of? Strange as it may seem it took some little time for the realization to sink in that it was not what we commonly understand as commercial pharmacy that was objected to but rather the designation "commercial pharmacy" applied to what is really merchandising or business administration.

All this fuss about a name! But after all there is justification for this point of view. The physician does not call his bookkeeping and collecting "commercial medicine." The lawyer does not designate his business administration "commercial law" and the chemist does not refer to the business phases of his work as "commercial chemistry." Advertising and selling are not peculiar to the practice of pharmacy, neither is bookkeeping. They come under the classification of business administration, or business science, if you please. While there may be modifications of general business methods for every profession or vocation, the fundamentals are the same. Let us therefore refer to the business or commercial phases of the drug industry as "Business Administration" or "Commercial Interests" and not as "Commercial Pharmacy." This will answer the two-fold purpose of being more accurately descriptive and avoiding any reflection on the professionalism of pharmacy as practiced in the prescription room or the laboratory.

When we now urge the colleges of pharmacy to turn out men fitted for the general work of the drug store as well as strictly pharmaceutical work we can resolve that a general course in business administration with special reference to the drug business be added to the present minimum pharmacy course. Most universities now have separate schools of business or colleges of commerce and it is not a difficult matter to add such training to the pharmacy curriculum.

A few years hence we will undoubtedly have a four-year pharmacy course in most institutions and these four years will be made up substantially of one year of general cultural training, the present two-year pharmacy course and a fourth year of business administration. This will give us a well-rounded course to fit all conditions in retail establishments and should be productive of a very high type of retail pharmacist.

## A SIXTEENTH CENTURY CHAMPION OF PHARMACY.\* BY WILLIAM J. McGILL.

Writers on things historical in pharmacy mention often Dumas, Scheele, Sertürner, and others acknowledged as leaders in pharmacy and chemistry, who began their careers as apothecaries. There is one neglected champion of pharmacy, not himself an apothecary, but in his own field as deserving of fame as these others, and who merits some recognition for his defense of a calling often maligned.

This was Bernard Palissy, the potter—an occupation sometimes considered a trade, but which in his conception of it, rose to the dignity of artistry. His life dated from 1509–1589, so that he had as contemporaries, Titian, Michel Angelo, Agnolo, Cellini, della Robbia, and in his own way can be considered an artist as much as any of these. His birthplace was in Perigord, France, and he was the son of a glass-worker, at that time accounted a noble trade. In his youth he traveled much, visiting all parts of his native country, becoming acquainted with

<sup>\*</sup> Section on Historical A. Ph. A., Cleveland meeting, 1922.

the pretensions of the alchemists and other pseudo-scientists of his time. He was interested particularly in natural history and natural phenomena. With little learning from books at his disposal, some of his sagacious deductions appearing in his later writings concerning the causes of the phenomena of nature which he had observed in his travels or which had been called to his attention are astonishing in their correspondence with explanations based on more modern theories. He settled in Saintes finally, and there labored for sixteen years to acquire the technique and experience which served him in producing the pottery with raised and colored figulines and the white enamel which made Palissy ware famous and as valuable to the discerning collector as the better known pieces of della Robbia, the Italian. Something of the iron conviction and unshakable persistence of the man is shown in that he burnt up most of his furniture and even part of his domicile itself in order that the fires under his kiln might be kept up and his experiments continue. Later the Constable of France, Montmorenci, became his patron, and finally he was called to Paris by the queen and became a retainer of the royal household. He died in the Bastille, however, in 1589, a victim of the religious feuds of his day.

This brief sketch is but to introduce a man of whose championship pharmacy can well be proud. The manner of its occurrence and his interest in a profession of which he was not a member can be explained by his firm friendship with Samuel Veyrel, the apothecary of Saintes, and also by his early travels which acquainted him with the silly assumptions of the quacks and charlatans then numerous in France.

It appears that in 1555 there was published at Lyons a pamphlet entitled "A Declaration of the Blunders and Tricks of the Apothecaries, very useful and necessary to every one studious and careful of his Health," written by Lisset Benancio, a physician, whose real name was Sebastian Colin. This broadside charged the apothecary with having little knowledge of his drugs, with counter-prescribing, and with extortion in the matter of prices.

Palissy's answer, defending the abused profession, refuted the charges made, and carried the fight into the other camp so ably that the physician was effectually silenced. The rebuttal was in the form of a tract, ingenuously called, "A Declaration of the Blunders and Ignorances of the Doctors, a Work very useful and profitable to every one studious and careful of his Health," and the author purported to be one Pierre Braillier "trading apothecary of Lyons." That Palissy was the real author has been well established. This tract appeared in 1556 and both it and the physician's work enjoyed a wide sale among the amused public.

Palissy says, among other things:

"It is well of Lisset to say that the apothecaries sell the virtues of drugs which God has supplied to us gratis, without cultivating them, which they ought not to do, and to tell us that it is a great sin against God. I would beg him to take the trouble to go and look for herbs, flowers, roots, seeds, gums, fruits, etc., and conserve and store them with great care and diligence, pay house rents, wages, and keep of servants, buy the drugs that come from distant lands for large sums of ready money, and then supply them gratis \* \* \* I leave you to judge when they have conscience to take a dollar for feeling a pulse and ordering a julep, while the apothecary shall find trouble to get paid two sols, which is the greater thief, apothecary or physician?" Of physicians he thinks, "they have studied mumming more than medicine; it is in that, at any rate, that they are wisest; and they might more fairly call themselves incorporated mummers than physicians, for it is the chief perfection that they have."

He dwells also upon doctors who cannot cure themselves, and upon doctors who prescribe absurdly so that it is necessary for apothecaries quietly to rectify their blunders. He proceeds to catalogue with much shrewd discernment the blunders of which some of the medical profession were guilty and points out in an able fashion the qualities and duties of an honest and capable physician. He answers Lisset's charge concerning the complexity of the apothecaries' remedies in this fashion:

"Master Lisset blames us, saying that we cause many drugs to be used by the sick, in order that we may get more money; it is very much the contrary, for the sensible apothecary will take heed how he gives to the sick anything about which he is not assured by experience, and of which he does not clearly know the properties. He will not be like many doctors, who prescribe confusing recipes, that is to say, great triacles, a quantity of drugs, to make believe that they are very wise, where two or three things having good relation to the malady would be of more use than all the triacles. If anybody would examine the physician who prescribes them, he would find him pretty well puzzled to explain the use of half, and would find his prescription an inextricable knot; for it is impossible that so many drugs can produce an action favorable to the malady, without setting up another which is hurtful and obstructive, and which may have some occult virtue that is out of place. Therefore I hold that practitioner to be wise who combines into one prescription few medicaments."

Other foibles and fads of the healing art of that day are touched upon with ridicule, such as the use of powdered glass, gold, sapphires, rubies, emeralds, and coral dust as medicaments. Briefly, the whole work is a shrewd and illuminating satire on some of the practices common in the 16th century which were dignified by the name of science, and some of Palissy's observations could be heeded with profit by merchants and practitioners of our own times.

If there be any moral in the tale, it is found in the closing words of Palissy's preface:

"Here are not blamed the learned and wise, and not to be prolix, I will pray to God very heartily that He will give his grace so well to exercise our estates and vocations into which it has pleased Him to call us, that it may be to His praise and glory, so that we may have no just occasion to blame and abuse each other, to the great prejudice and debasement of our profession."

College of Pharmacy, University of Michigan, Ann Arbor.

## THE STANDARDIZATION OF SCHOOLS OF PHARMACY.\* BY WILLIAM B. DAY.

Standardization is the topic of the day. Standardization of drugs, chemicals and galenicals occupies the attention of the revision committees of the United States Pharmacopoeia and National Formulary. Standards for state licensing examinations, drug store experience and educational qualifications are prominent in the deliberations of our affiliated organizations, the National Association Boards of Pharmacy. The American Conference of Pharmaceutical Faculties is discussing educational requirements, standards for admission to schools of pharmacy, standards for the courses given by these schools, standards for the equipment of the schools and even suggests standardizing the faculties themselves.

<sup>\*</sup> Section on Education and Legislation, A. Ph. A., Cleveland meeting, 1922.