

tutions which shall require years of study and training, and employ the entire time and energy of students; then we shall doubtless hear more criticism upon the quality of pharmaceutical education than we do at present. But we should not await the arrival of that period, before we begin to consider to what extent studies of botany, physiology, and mineralogy, of liberal general culture, and of modern languages, ought to be required for university graduation in pharmacy.

In the German Universities pharmacy is as much of an organized and provided course as is medicine; France has her thoroughly established schools of pharmacy; and Britain has numerous laboratories of pharmaceutical chemistry. In America, the young pharmacist who is self-impelled to qualify himself for his vocation, has been obliged to gather instruction at colleges devoted to other purposes, and to adapt the fragments to frame his own education. At the third International Pharmaceutical Congress, held in Bavaria last September, and in which our nation was represented, it was unanimously resolved that "high schools of pharmacy, as an integral part of the universities, with graduated pharmacists as professors, are essential to the interest of the public and the profession.

Pharmacy is a pursuit which must be scientific, not only for the safety of medicine and society, but for its own relief. Years of practice may give facility in dispensing, deftness in wrapping and tact in sale; qualities having a positive value in the labor market; but they do not relieve the vocation from the drudgery of trade and the humiliation of ignorance. It is pitiful that a man with the name of pharmacist should plod through life ignorant of the material in his hands and the changes under his eye, deaf to the chemical language by which all matter is defined, and blind to the scientific movements stirring the world.

THE ADVENTURES OF CINCHONINE.

Despite the exertions and assurances of manufacturers of the cinchona alkaloids, it appears to be utterly impossible to find a market for cinchonine. It is vain to quote Wood and Bache, or Dr. Turner, that sulphate of cinchonia is nearly equal in antiperiodic power to sulphate of quinia; the druggists won't believe it, neither will the doctors, and a man shaking with ague does not usually feel in the humor to become the subject of experiment. Cinchonine, as such, evidently won't sell; another expedient must be adopted.

Try another name, says one, call it *Sweet Quinine*. The experiment is tried and sweet quinine is launched upon the world with

every outward prospect of success. Brought out under the fatherly hand of one whose name was thought sufficient guarantee for the genuineness of the preparation, it flourished for a time, but, alas for sweet quinine—the hand of the chemist was upon it—the deceit was unveiled—its doom was sealed, and its end was bitterness indeed.

Once more thrown upon the world, this adventurous alkaloid finds its way to the English metropolis, to reappear on this side of the Atlantic in a dignity suited to its late residence, "*Light Sulphate of Quinine; manufactured by Lord Bros., Ludgate Hill, London.*" The title relishes much of the stability of a London house, not a worthless preparation without its maker's name, but "Lord Bros.," and "Ludgate Hill" no less; surely none will question the genuineness of our alkaloid this time. But what says our Chicago friend, *The Pharmacist*:—"The 'quinine' was submitted to analysis and found to be hydrochlorate of cinchonine. The manufacturers have taken advantage of this resemblance to perpetuate an extensive and most reprehensible fraud, and it is to be hoped that their field of operations may be transferred from Ludgate to 'Newgate,' with the privilege of conducting business in the latter locality for an unlimited period." *Cruel Pharmacist*, this is too bad, but we will try again.

This time the public are to be approached with greater caution, they must be taught that quinine is not the antiperiodic, but that other cinchona alkaloids, of equal if not superior power exist; and that quinia only acquired the rank of superiority as a febrifuge by reason of priority of discovery. Having been satisfied on these points by a perusal of "*The Chemistry of the Cinchona Barks*," in the *Boston Journal of Chemistry*; and also understanding thoroughly the whole matter from the careful study of a gratuitous treatise "*On some of the Chemical Constituents of Calisaya Bark, and the Methods usually employed in their Separation*," the coast is clear for the introduction of the latest novelty in medicine—"Cincho-Quinine;" the history of this valuable preparation is, briefly, as follows:—A manufacturing firm in Boston being convinced that a combination of all the alkaloidal principles of bark would be very desirable, instituted a series of experiments with a view of obtaining such a preparation. To use their own words "this desirable end has been accomplished" and cincho-quinine is the result. According to their statement it contains: 1, Quinine, 2, Cinchonia, 3, Quinidia, 4, Cinchonidia, 5, other alkaloidal principles present in the bark.

Mr. Wenzell, a member of the California Pharmaceutical Society, has been experi-

menting a little on this cincho-quinine, and has embodied the results in a paper published in the last number of the *Pacific Medical and Surgical Journal*. His conclusions are as follows:—"That cincho-quinine contains neither quinia, quinidia, or cinchonidia, but that it really consists of cinchonia containing about two per cent. of quinia and cinchonine, Mr. Wenzell further thinks that to purchase cinchonine as cincho-quinine at four times its value is not by any means economical—a conclusion which our readers will readily endorse, and thank Mr. W. for the information.

Thus closes the third scene in this chapter of humbug, all of which has been enacted during the past year. What further attempt may be made we cannot tell, but think it is surely time to change the programme. To use a vulgar but expressive phrase, cinchonine is "played out." The opium alkaloids offered a tempting field, but from the timely note on *Scapnia*, by Prof. Croft, published in our last, we think the attempt will scarcely be tried.

Cod Liver Cream.

A correspondent of the *Chemist and Druggist*, gives a formula for the preparation of this delightful compound. The cream is said to acquit itself creditably in comparison with an average custard. Why not call it Cod Liver Oil Custard? the title is irresistably tempting, if not decidedly epicurean. A quarter of an ounce of gum tragacanth, elect, is steeped in sixteen ounces of cold water for twenty-four hours, during which time it should be occasionally stirred; the resulting mucilage is shaken with one-sixth to one-half its bulk of the oil, adding to each ounce of the mixture one drachm of alcohol, containing a drop of essence of lemon, almond, and oil of cassia: a permanent emulsion is formed.

An Ancient Pharmaceutical Ensign.

An advertisement in one of our country papers closes with the following patriotic reminder:—"Remember the Red Mortar and the Union Jack, that flag which has stood the battle and the breeze for over a thousand years, God save the Queen." Not being familiar with the quartering of arms we have consulted Burke, and other eminent heraldic authorities, but by a strange oversight, the "Red Mortar and the Union Jack" although of such undoubted antiquity, receives no notice. We should like to have the flag for the Museum.

MEMBERS of the Society are reminded that the nomination of officers takes place at the next meeting, which will be on June 2nd. We hope there will be a good turn out of resident members.