mire of financial and other considerations, the customary over-burdened two-year course should be extended by at least one year.

It is a matter of encouragement to educators that Boards of Pharmacy and State Associations are taking more interest in pharmaceutical curricula. The graduation prerequisite question has been taken up in at least three legislatures— California, Illinois and Washington. While their legislatures have failed to give adequate support to such a measure, the failure has not been due to lack of support of earnest, thoughtful and, I may say, progressive pharmacists. In the State of Washington, we are told, the Board of Pharmacy was in favor of graduation prerequisite requirement but the Association was lukewarm. When State Associations and Boards of Pharmacy work together with the teaching institutions insisting upon a properly balanced curriculum in our colleges, keeping in mind the three elements referred to in this paper, the present day needs of pharmacy are more surely and satisfactorily to be met, than they can possibly be when these factors of education are for any reason not properly co-operative and co-related.

## THE MAKERS OF MEDICINES.

The revolution which has taken place in the making of medicines during the past half century was made most manifest by a gathering held at the Waldorf-Astoria Hotel on February 6 and 7. Here were gathered some forty makers of medicine, representing a capital of probably fifty million dollars, whose annual output probably approximates seventy-five million dollars a year in value. Never before in the history of medicine has there been such an aggregation of vast interests affecting the makers of medicines gathered in one small room. Fifty years ago such a gathering would have been impossible. Then the individual pharmacist made his own fluidextracts, his tinctures, his pills, and even his plasters. Then there were no biological products used in medicine except vaccine virus. Serums were undreamt of. Galenical preparations made direct from the drug by the individual retailer had not been replaced to the extent they now have been by alkaloids and active principles extracted by chemical manufacturers. Then every pharmacist was a manufacturer, even if he did no more than make tinctures and pills. Now the pneumatic pill machine makes and coats with gelatin a million pills in less time than it took the oldtime pharmacist to make a hundred. And it does the work on the whole better. The workman who makes quinine pills in the modern laboratory does nothing else. He becomes a highly specialized expert. The product is uniform and niceties of composition and manipulation are worked out in a way which could only be done under the modern method of specialization. -American Druggist.