## the Chemish + Druggist of. australasia. 1st april 1901.

The Extraordinary Vacancies on the Board caused by the resignations of Mr. Hill and Mr. Hutton, are regrettable, though not unexpected. It was hoped these gentlemen could see their way to take an active part for years to come in the management of an interest which owes so much to their assistance at its foundation. It was rather against his inclination when Mr. Hutton gave his assent for candidature at the last election. The same can be said of Mr. Hill; indeed, in 1896, when on his motion the Board offered to the Queensand Board recognition of certificates, Mr. Hill was prepared to say that his mission in political pharmacy had been accomplished. He was associated with the leaders of pharmacy in 1885, when steps were taken to found the society, which was incorporated a year later, and has been in office ever since, and a regular attendant at the meetings up to two years ago, when the exigencies of his business required his forced absence from the Board meetings. Mr. Hill was apprenticed in Adelaide, and having been brought up in the old days of pharmacy, when practical pharmacy was a fact, and not a nightmare, he never allowed himself to become enthusiastic with what he would call "the classical side of modern pharmacy." He believed in that system of education which made an assistant a practical business man, but essentially a business man, and who at the present day does not think with him? But alas! who amongst us can shut his eyes to the pressure of a condition of things forced on us by the changed aspect of pharmacy outside of South Australia? There is no standing still elsewhere, consequently not here, nor does the oncoming pharmacist wish it so, realising, as he does, that such would leave him hopelessly in the rear. The Board parts with Mr. Hill with deep regret, and their kindest regards will be ever with him.

The Examinations have been held and the results known. In the Preliminary the striking disappointment is in the subject of Arithmetic. Calculation is the basis of all scientific education, not only as a thing for immediate use, but also for its strengthening powers to all the processes of the mind. Why this should have to be said again is difficult to conceive, but on the recommendation of the examiners the Board will once more draw the attention of the heads of schools to this important subject. The Qualifying Examination provided startling surprises. Two good strong candidates equally well furnished with University certificates present for Pharmacy, Materia Medica, and Dispensing. Of these A got 75, 90, and 100 marks, and B got 20, 50, and nothing for his absolutely bad display of technique and chemical knowledge in dispensing, notwithstanding his pass certificate in chemistry. In the one case chemistry was very properly made the servant of pharmacy, and in the other it appeared to be simply obtained as some form of imposition to be gone through and done with. A worse contrast is that A was a retail assistant, not too well favoured as to

leisure, and B has for some years been able to leave work at 6 o'clock, have his evening, Saturday afternoon, and all holidays. The tabulated results of the examination show other peculiarities of a like nature, and the whole is a splendid problem for those who care to think out the question of "what shall we do with our boys?"-the pharmacy students.

Education and Examination .- A Criticism .- Mr. C. S. Hill, in his letter containing his resignation as a member of the Board, continued: "I would like to say that there is a deal of growing dissatisfaction expressed with the educational facilities of the Board and Council as crystallised in the curriculum and examination. As they stand they are held to be somewhat expensive and exacting, and yet to a degree unsatisfactory, and beyond the needs and prospects of the drug trade. The arrangements of the University, excellent as they are, appear not always adapted to our youth. The part of the science course taken covers a wide area, and with a lecture of one hour a week, and that largely occupied with metallurky, ore extraction, &c., a year's course is seldom sufficient to warrant facing the examinations; they seem better suited to School of Mines students. The proper study of a student in pharmacy is pharmaceutical chemistry. The text-books authorised by regulation 44 are, inter alia, "Attfield" and the "B.P." This and the context (regulations 41, 42, 43, 44) defines the course of study and examinations, and until the governing bodies arrange that this can be taught in a reasonable time, and at a reasonable cost, their work is still before them. I write this without any desire to embarrass the Board, but to ask that these matters may be considered."

This letter was referred to the Council of the Pharmaceutical Society. There was no meeting of the Council in March, and it will be considered at the April meeting. Certainly there should be no room for complaint in a subject like the education of pharmaceutical students, and the Council will do well to thoroughly review the whole matter, having in mind the subjects of the Qualifying Examination, the former absence of adequate training, and the present system. Then, if there are other and better means of educating the students, the Council should certainly adopt them. For this year all students are now entered. In the ensuing 12 months the Council will have ample time to amend their syllabus, their fees, or their school, if it

is found desirable to do so.

## GIST OF AUSTRALASIA. May 1st 19 19 19

Three of the samples, marked respectively A1, A2, 13, were purchased from local manufacturing wholesalers; whether the articles were prepared by them I/ am not in a position to say. Of the remaining ones, & is the product of a historic London house, whilst 41 and G2 are from well-known German firms.

Unfortunately, the "B.P.," though prescribing a nethod of preparation of the liquid extract, provides 10 tests or standard for the product, so that ong can-10t say what sample does and what does not conform to the "Pharmacopæia." Judged on the yield of exract, the two samples spoken of above, viz. Al and 32, were markedly different, and this line of judgment vas fully borne out by the medicinal effect. A mixure made up on different occasions with these liquid extracts might easily, by the different appearance and effect, cause a patient to complain.

In the table the sp. gravity at 16 deg/C., the (true) percentage of dry extract, and the ash of the samples, ire given. The ash is calculated on the liquid exract, and also on the dry extract yielded by each. In iddition, for the purpose of comparison with Merson's igures, I have calculated the dry extract on a w/v asis, i.e., grammes per 100 c.c. The alcohol content I ave not determined.

Sample.	Sp. Gr., at 16 deg. C.		Dry Ex- tract, Grs. per 100 e.e.	Ash, calcu- lated on Liq. Extract	Ash, calcu- lated on Dry Extract.
A <sub>1</sub>	1.0587	18.60	19.69	0.805 %	4.33 %
A <sub>2</sub>	* 1.16.0	* 51.56	60.27	1 0.831 %	B.32 %
A <sub>3</sub>	1.0479	23.03	24.13	1.57 %	6.81 %
E	1.0767	26.44	28.51	Not deter	mined
G <sub>1</sub>	1.0592	27.75	29.39	0.906 %	3.26 %
G <sub>2</sub>	1.0110	20.22	27.29	1.160 %	4.42 %

The extract of Az remained moist even after prolonged heating at 105 to 110 deg. C. The sample contained a large proportion of glycerin, the high p. gr. being also due to this. The ash percentages were calculated on an assumed yield of 25 per cent, dry extract.

ith respect to the sample Az, the abnormal figures are lly accounted for by the presence of Glycerin. I am ld that liquid extracts are on the local market fered at low figure by substitution of Glycerin for cohol in the preparation. The article referred to is identy/one of these, but had been supplied as "B.P."

HENRY D. B. COX, M.P.S.

Prince Alfred Hospital, Sydney.

## PHARMACEUTICAL EDUCATION IN SOUTH AUSTRALIA.

Sir,-I was much struck with the truth of many of of the remail ts made by Mr. Hill in connection with his resignation from the Pharmacy Board of South Australia. 'We cannot well spare him, for I am afraid that many of those on the Board scarcely realise their responsibilities.

Mr. Hill, I feel sure, speaks the sentiments of most of the pharmacists in this State, especially those who have apprentices, and what shall we say for those who have sons fearning the business, and have to find the money for their education? They have to pay a very high figure for a course of instruction at the University, and give a deal of time, and then, when the students go up for their Standard Examination, they find themselves all at sea, the reason being that the Board and Council have not provided the proper course of study to attain the end required by the regulations. Has not this distinctly lessened the interest the employer takes in his apprentice? Previously it was his duty to teach the boy his business; now it is the University's, at somebody else's cost-most likely the astonished pirents. I believe there are some still left on the Boar, who feel the same as myself, but I fear they are in the minority. Mr. Hill's resignation will not be in van if it leads to rectification. As things are at present, I am afraid the arranging of matters is left too mich to one man, and if my fears are well founded, I think the sooner it is altered the better for all arties. To my mind we require here a School of