The minutes of the previous meeting, having been published, were confirmed and signed.

The following candidate, after ballot, was duly elected an ordinary member of the Association

DAVID NEIL PARFITT, M.B., B.S.Lond., B.Sc., D.P.M., M.R.C.S., L.R.C.P., Senior Assistant Medical Officer, Warwick County Mental Hospital, Hatton. Proposed by Drs. A. T. W. Forrester, H. B. Leech and A. R. Grant.

Drs. B. H. Shaw, M. A. Archdale and D. Blair were elected Representative Members of Council for the ensuing year.

Dr. B. H. Shaw was elected Divisional Chairman, and Dr. J. Ivison Russell was re-elected Divisional Secretary.

It was resolved that the Secretary be authorized to make the necessary arrangements for the next Autumn and Spring Meetings.

The business meeting then closed and members proceeded to the cinema hall, where the film "The Mystery of Life " was shown and explained by Dr. Dove Cormac, who, in an interesting lecture, referred to special aspects of the film in relation to psychiatric and sociological problems.

After the meeting, members and visitors were very kindly entertained to tea by Dr. and Mrs. Dove Cormac, and Dr. EDGERLEY, on behalf of the Division, thanked the Superintendent and Visiting Committee for the generous hospitality which had made the meeting so enjoyable.

IRISH DIVISION.

THE SPRING QUARTERLY AND CLINICAL MEETING of the Irish Division was held at the District Mental Hospital, Carlow, by kind invitation of Dr. T. A. Greene,

At the District Mental Hospital, Carlow, by kind invitation of Dr. T. A. Greene, Medical Superintendent, on Thursday, April 7, 1932. The following members were present: Dr. J. O'Conor Donelan in the Chair. Drs. S. Blake, R. D. Brennan, P. J. Cassin, Kathleen Dillon, W. Eustace, Nora May Fitzgerald, John Fitzgerald, J. F. Fitzgerald, J. J. Fitzgerald, Dorothy Gardner, P. Grace, L. Gavin, T. A. Greene, B. Honan, D. L. Kelly, G. H. Keene, B. Lyons, R. R. Leeper, J. C. Martin, Elizabeth Mahony, C. B. Molony, John Mills, Eveleen O'Brien, James Scott, R. Taylor, R. H. Taylor, T. W. Weir, R. Thompson (Hon. Sec) R. Thompson (Hon. Sec.).

In the forenoon, members were conducted over the Hospital and through the gardens and grounds by Dr. Greene and the Staff of the Hospital, and, amongst other things, they had an opportunity of seeing the many beautiful stained-glass windows recently added to the Roman Catholic and Protestant Churches. After luncheon, the members inspected the new Convalescent Home, Kelvin Grove, recently acquired by the Hospital.

QUARTERLY AND CLINICAL MEETING.

The minutes of the previous meeting were read, approved and signed by the Chairman.

Following the reading of the minutes, the Chairman referred to the loss the Division had sustained by the recent death of Dr. Walter S. Smyth, Medical Superintendent of Antrim Mental Hospital. A vote of sympathy was passed in silence—the members standing—and the Secretary was directed to convey the sympathy of the Division to the relatives. Dr. LEEPER then referred to the loss the Association had sustained by the recent death of Prof. George Robertson, of Edinburgh. Further tributes to the late Prof. Robertson were paid by the Chairman and Dr. Mills, and the Secretary was directed to convey to the relatives the sympathy of the Division.

The following candidates were, after ballot, declared unanimously elected members of the Association.

ALLEN, JAMES STEWART, M.B., B.Ch., B.A.O.Belf., Assistant Medical Officer, Antrim Mental Hospital.

Proposed by Drs. Norman, B. Graham S. J. Graham and Dorothy Gardner. O'SULLIVAN, EDWARD N. M., B.A., M.B., B.Ch., B.A.O., D.P.M.N.U.I., Assistant Medical Officer, District Mental Hospital, Killarney.

Proposed by Drs. L. Gavin, P. Moran and Kathleen Dillon.

TAYLOR, RICHARD HAMILTON, M.B., B.Ch., B.A.O., D.P.H.N.U.I., Pathologist, Grangegorman Mental Hospital, Dublin, and 25, Lower Baggot Street, Dublin. Proposed by Drs. John Fitzgerald, J. O'Conor Donelan and R. R. Leeper.

Proposed by Drs. John Fitzgerald, J. O'Conor Donelan and R. R. Leeper. WALSH, FERGUS O'CONNELL, L.R.C.P.&S.I., Assistant Medical Officer, Portlaoighise (Maryborough) District Mental Hospital, Leix.

Proposed by Drs. Pierce Grace, R. Taylor and G. J. Harrison. WEIR, THOMAS WILLIAM HAROLD, M.B., B.Ch., B.A.O.Belf., Assistant

Medical Officer, County Mental Hospital, Armagh.

Proposed by Drs. Dorah E. Allman, S. Blake and R. Thompson. The meeting then proceeded to the election of the officers of the Division for

the very 1932-33, and the following were declared elected :

Secretary of the Division : Dr. R. Thompson.

Representative Members of Council: Drs. J. O'Conor Donelan and Laurence Gavin.

Dr. MILLS then proposed and Dr. J. J. FITZGERALD seconded that Dr. O'Conor Donelan be re-elected Chairman of the Division. This was carried unanimously. The Mental Nursing Advisory Committees to the General Nursing Councils

were reconstituted as follows: For Northern Ireland : Drs. M. J. Nolan, N. B. Graham, Dorothy Gardner,

J. Watson, F. J. Deane.

For Irish Free State: Drs. J. O'Conor Donelan, R. R. Leeper, L. Gavin, J. C. Martin, S. Blake.

Dr. Nolan and Dr. O'Conor Donelan were re-elected Examiners for the Associa tion's Certificate in Psychological Medicine.

On the motion of Dr. GAVIN, seconded by Dr. MILLS, it was decided not to hold a Summer Meeting of the Irish Division, as many Irish Members had expressed their desire to attend the Annual Meeting in Scotland.

The Autumn Meeting was fixed for Thursday, November 3, 1932, at the Royal College of Physicians, Kildare Street, Dublin.

Dr. JOHN FITZGERALD, Grangegorman Mental Hospital, read a paper entitled "Some Remarks on the Sero-Diagnosis of Syphilis, with Demonstration of Tests" (see below).

Following this paper, Dr. R. H. TAYLOR, Pathologist, Grangegorman Mental Hospital, described the actual tests and gave a demonstration of the simpler ones.

The CHAIRMAN, Dr. GREENE, and others expressed their appreciation of the work being done by Dr. Fitzgerald and Dr. Taylor in the very important field of serological diagnosis.

Dr. GAVIN then proposed a vote of thanks to Dr. and Mrs. Greene for their very kind hospitality. This was seconded by Dr. J. J. FITZGERALD and carried unanimously.

Subsequently, the members were entertained to tea by Mrs. Greene.

"Some Remarks on the Sero-Diagnosis of Syphilis, with Demonstration of Tests," by JOHN FITZGERALD, M.D., D.P.M., D.P.H., Senior Medical Officer, and R. H. TAYLOR, M.B., D.P.H., Hon. Bacteriologist and Pathologist, Grangegorman Mental Hospital.

(Abstract.)

FOLLOWING the paper by Drs. J. E. Nicole and E. J. Fitzgerald, of Winwick Mental Hospital, on "The Sero-Diagnosis of Syphilis" (which appeared in *Journ. Ment. Sci.*, January, 1932), we decided to investigate for ourselves the accuracy of some of the flocculation tests.

It was unfortunately only found possible to perform these tests on blood-sera, and no tests were done on cerebro-spinal fluid.

Our ordinaryWassermann test was performed by Wyler's No. 1 method. The total number done was $_{381}$, and of these the percentage of positives was $_{15\cdot2\%}$. This figure does not include 10 cases which were +1 or less. Of this number 140 had in addition the following tests carried out : the special "mental hospital" Wassermann, described by Dr. Mann, the Meinicke micro- and macro-M.K.R. tests, and the Sachs-Witebsky citochol flocculation test.

In the 140 cases on which all tests were done-

		positive negative				
The	re was	s complet	e agree	ment i	n.	92.8% of tests.

10 cases disagreed in the tests.

Of the 10 cases which disagreed, 4 gave clear negatives in all tests except the micro-M.K.R. (14, 21, 23, 25). Of these 4, 2 were doubtful positives (14 and 21) and 2 positive (23 and 25). On re-examination, using diluted serum the 2 doubtful positives were completely negative, and re-examination after a provocative dose of N.A.B. $\cdot 3$ grm. one of the positive cases (25) gave a negative result in all tests. The other case (23) was discharged from hospital and a second examination could not be made. As both of these positives occurred early in our series, we are of the belief that the readings were faulty from inexperience, so that if we take the second positive as being a wrong positive our corrected figures are—

24 positives . = $17 \cdot 1\%$. 110 negatives . = $78 \cdot 6\%$. 6 disagreements . = $4 \cdot 3\%$.

As regards the micro-M.K.R., which disagreed on 8 occasions, 4 of which we have just eliminated; of the remaining 4, one (136) gave a positive reaction with the macro-M.K.R., but all the other tests were negative. This case died and some serum was drawn off from the right ventricle after death and re-tested, giving the same results. This case was clinically one of acute confusional insanity. A *post-motem* could not be done, but we think the micro and macro gave definitely wrong positive results in this case. The three other cases gave negative micro-M.K.R. reactions. In one of these (101) all the tests were full negative except the Mann's Wassermann which was a + 10. This was a private case of R.H.T.'s, sent to him for blood examination, and she refused to have a second test done.

The other two cases (52 and 116) were clinically syphilitic so that on two occasions the micro-M.K.R. was definitely wrongly negative, that is 2 cases in 140 examined or 1.4% of cases, and in one of these two definitely syphilitic cases the macro gave a strong positive. The macro test disagreed in 3 cases (101, 116 and 136) with the findings of Mann Wassermann, on two occasions (101 and 116) giving a negative where the Mann Wassermann was positive, and in one case (136) giving a positive where the Mann Wassermann was negative. Then by employing the two Meinickes the resultant error in our 140 cases was I case in which both tests failed together to diagnose a definite syphilitic and gave a negative result, that is 0.7% error. Two cases (101 and 116) gave negative results to all tests except the Mann Wassermann which was +10 in one and +15 in the other. The latter had the smallest trace in the ordinary Wassermann as well. These are two private cases (R.H.T.) and one of them (i. e., +15) is undoubtedly a case of syphilis which has not had sufficient treatment and has come down from +4 to his present trace within a period of 18 months. The +10 case refused to have a second blood examination done. The last of these 10 cases (136) gave a positive reading in the micro- and macro-M.K.R. and negative reading to all other tests.

The Sachs disagreed 5 times (52, 71, 101, 116, 136). On two occasions (101 and 116) giving a negative when all other tests were negative with the exception of the Mann Wassermann, which was positive. On one occasion (136) giving a negative when both Wassermanns were negative, but the two Meinickes were positive. On one occasion (71) it gave a negative when the two Meinickes and the Mann Wassermann were positive, but the ordinary Wassermann negative. In the last case (52) it gave a negative, with all the other tests positive except the micro-M.K.R., which was negative.

The Sachs-Witebsky, therefore, was definitely wrong on two occasions, giving a negative result where cases were definitely syphilitic. Never in the whole series of cases did the Sachs give us a positive where the case was a true negative. In other words we found that all positive Sachs were true positives, but all negative Sachs were not true negatives.

The Wyler-Wassermann.—On two occasions (71 and 101) the Wassermann gave

a full negative with the Mann Wassermann $+7\frac{1}{2}$ and +10 respectively. In the +10 case all the other tests were negative and this case was the one that refused a re-examination, thus no conclusion can be drawn. In the $+7\frac{1}{2}$ the Sachs-Witebsky was also negative, but other tests were positive and we believe that this was a wrong negative Wassermann.

In two other cases (6 and 116) the Wassermann only gave a trace and the Mann Wassermann was +30 and +15 respectively. In the case +30+ all other tests were full positive, and in the +15 case the other tests were negative. Both these cases were known to be syphilitic.

It would appear then that the ordinary Wassermann is not the highly sensitive and specific test which it is in ordinary practice.

Mann and Partner's Wassermann.-This test gave the most perfect results in our hands, and with the exception of the one case before referred to, which refused reexamination, all positives were true positives. So far as we are concerned the mental Wassermann gave us high correct results on these figures, and from our investigations it was the final court of appeal. We are glad to see that as a result of our investigations we were forced to the same conclusions as Dr. Wyler has come to, and which he announced in the publication of the Ministry of Health (England), February, 1932, namely that the ordinary Wassermann is not sensitive enough in mental hospital practice. His altered Wassermann, is, as he admits, due to a communication he had from Dr. Mann on the subject of the special Wassermann. It is Dr. Mann's special Wassermann which we have used. (See Report of Pathological and Bacteriological Sub-Committee, Journ. Ment. Sci., July, 1927.) The results of the various tests in the ten cases under discussion are summarized

in the subjoined table on the analysis of which we base our conclusions.

		Blood.					
No.	Name.	Meinicke (micro-M.K.R.).	Meinicke (macro-M.K.R.).	Sachs-Witebsky.	Wassermann I.	Wasserman mental.	Remarks.
6	Ј. м—	++	++++	+	±-	+30+	Post - mortem findings typical of general paralysis.
14	P. A—	±	-		_	_	Test repeated, full nega- tive.
21 23	Е. М— Е. К—	± +	_	=	_	_	Ditto. Case discharged. Second test not done.
25	м. ј—	+	-	-	_	_	Test repeated, full nega- tive.
52 71	E. J. S	- +	+++	-	++	+ 30+ + 7·5	Definite case of syphilis. Clinically early general paralysis (opinion of J. F.).
101	N. F	-	_	-	_	+10	Case which refused to have second test. (Private
116	P. D	-	-	-	+-	+15	case of R. H. T.) Known syphilitic. (Private case of R. H. T.)
136	E. G—	+	+++	-	_		This is the case which died. Test repeated, same result.

Investigation of the League of Nations' report on the "Sero-diagnosis of Syphilis" (Montevideo, 1931) shows interesting figures as follows: 966 sera tested; 662 cases of syphilis; 304 non-syphilitic controls.

		Controls				
Kahn (P))			75·6	•	ι·ο
Muller (M	1.B.R. II)		•	69 · 3	•	•7
Bordet V	Vassermann	Sordelli	•	55.9	•	0
,,	,,	Wyler .	•	54 · 4	•	0
,,	,,	Moreau	•	64 · 7	•	13.9
,,	,,	De Assis	•	54 . 9	•	4 · 3
,,	,,	Puppo	•	45·4	•	5.6
,,	,,	Torrazza	•	55·5	•	2.6

From these figures it will be seen that the Kahn and the M.B.R. II are in advance of the various complement-fixation tests and that the M.K.R., which we employed, gave more positives than any Wassermann test except the Bordet-Wassermann test of Moreau, which, however, is ruled out by the huge figure of 13.9% wrong positives. The M.K.R. shows 2.4% wrong positives.

Now the Mann Wassermann gives a stated 20% higher positives result than the ordinary Wassermann, which brings it up to the figures of the Kahn, and unlike the Kahn it gives no wrong positives. We intend to try these two tests, *i. e.*, the Kahn and the M.B.R. II against the Mann-Wassermann and see for ourselves the comparative values of this complement-fixation test and the two best flocculation tests.

Harrison states that the League of Nations' Health Organization recommended to carry out two tests, one a Wassermann, the other a flocculation test, and that a good flocculation test is particularly desirable in treated cases where one wishes to detect the slightest sign of syphilitic activity. Further "in a patient whose progress under treatment is watched by a good flocculation test, the spirochæte gets less rope because the Wassermann becomes negative earlier than the flocculation test and when insufficient treatment is given the flocculation test becomes positive before the Wassermann and is, therefore, a sign for further treatment." It is our opinion that the Mann Wassermann also gives this information which is claimed by a good flocculation test, and which is certainly not given by the ordinary Wassermann.

Nicole and Fitzgerald in their recent paper state that the micro- and macro-M.K.R. were only once wrongly negative in a known positive case and as a routine procedure they suggest the application of a micro-M.K.R. to all admissions and testing the positives by means of a macro-M.K.R. By this means they state that a correct diagnosis is likely to be arrived at in at least 99.7% of cases.

Prentice (*Brit. Med. Journ.*, January, 1931), writing on the results of the investigation of 384 sera, states "The Meinicke micro-reaction has proved a very serviceable and reliable test." We agree with him in this, but we emphatically disagree with his conclusions that rows 1, 2 and 3 in the macro test can be eliminated, as we have had full positives when the 4th row was a full negative.

Ogden and Partner in an article "Meinicke Test in Mental Cases" (Lancet, July 18, 1931) summarize as follows:

(1) An analysis of 1000 parallel Wassermann and M.K.Rs. on sera from patients in the London County Mental Hospitals showed an agreement in 96.6% of the total.

(2) That the Meinicke reaction tends to persist longer with the sera of treated cases than does the Wassermann reaction.

(3) The micro-M.K.R. showed 95.1% agreement with the macro-M.K.R.

(4) That the macro is a useful parallel test to the Wassermann, especially on account of its simplicity, clarity of result and freedom from non-specific positive reactions.

Conclusions.

(1) We agree that the micro- and macro-M.K.R. and Sachs-Witebsky are three very simple and reliable tests, and are particularly suitable for routine investigation of admissions in mental hospitals where facilities are lacking for the more elaborate flocculation and complement-fixation tests.

(2) In the case of the Sachs-Witebsky we found all positive Sachs are true positives; but all negative Sachs are not true negatives.
(3) We cannot make a definite statement in the case of the micro- and macro-

(3) We cannot make a definite statement in the case of the micro- and macro-M.K.R. as we have done in the Sachs; but we do say, that for such simple tests, the error is very small.

(4) The ordinary Wassermann in our hands has demonstrated one of the points which we set out to prove, viz, that it is not sensitive enough for treated and old-standing cases.

(5) The Mann and Partner Wassermann is, without doubt, the most specific and sensitive of all the tests we have compared and is a decided advance on the No. 1 Wyler.

We wish to thank Dr. O'C. Donelan, Medical Superintendent, of Grangegorman Mental Hospital, for the interest and support which he has given us in these investigations, also for his permission to quote work done in the hospital laboratory, and for the time he spent in converting certain apparatus to our requirements; also Dr. Rodgers, Medical Superintendent, of Winwick Mental Hospital, for kindly inviting one of us to his hospital so that we might have first-hand knowledge of the tests being performed; Drs. Nicole and E. J. Fitzgerald for all their trouble in arranging a complete demonstration of the tests on the occasion of our visit, and for their help and advice on the numerous occasions on which we had recourse to them. We would also like to thank them for supplying us with references, etc., in connection with these tests. We wish also to thank the medical staff at Grangegorman and Portrane Mental Hospitals for their co-operation in providing us with material for these tests. Lastly we are indebted to Mr. G. Kennedy, our Laboratory Assistant, for his cheerful and willing help in a labour which added many hours of duty to an already well-filled daily routine.

THE BOARD OF CONTROL.

COMMITTEE ON STERILIZATION OF MENTALLY UNFIT.

The Board of Control, with the approval of the Minister of Health, have appointed a Committee with the following terms of reference: To examine and report on the information already available regarding the hereditary transmission and other causes of mental disorder and deficiency; to consider the value of sterilization as a preventive measure having regard to its physical, psychological and social effects and to the experience of legislation in other countries permitting it; and to suggest what further inquiries might usefully be undertaken in this connection. The Committee is constituted as follows:---Chairman: L. G. Brock, Esq., C.B., Chairman of the Board of Control; Wilfred Trotter, Esq., F.R.S., M.D., M.S., F.R.C.S., Member of the Medical Research Council; R. A. Fisher, Esq., Sc.D., F.R.S., F.R.A.S.; A. F. Tredgold, Esq., M.D., F.R.C.P., M.R.C.S., F.R.S.Ed.; Miss Ruth Darwin, Commissioner of the Board of Control; E. W. Adams, Esq., O.B.E., M.D., Medical Officer, Board of Education; E. O. Lewis, Esq., M.D., F.R.C.P., Senior Medical Officer, Board of Education; E. O. Lewis, Esq., M.A., D.Sc., M.R.C.S., L.R.C.P., Commissioner of the Board of Control; Mr. F. Chanter of the Board of Control is Secretary of the Committee.

CHANGES IN THE PERSONNEL OF THE BOARD.

Dr. Arthur Rotherham, Senior Commissioner of the Board, left in October, 1931, on his appointment as Lord Chancellor's Vistor, and Mrs. Ellen F. Pinsent retires on July 31, 1932.

The King, on the recommendation of the Minister of Health, has approved the appointment of Dr. W. Rees Thomas, hitherto Medical Superintendent of Rampton State Institution, to be a Senior Commissioner in the place of Dr. Rotherham; and of Miss Ruth Darwin, formerly an Honorary Commissioner of the Board, and since January 1, 1931, a Commissioner, to be a Senior Commissioner in succession to Mrs. Pinsent.