Whereupon it was-

RESOLVED,—That the Report now read be received and adopted by the Academy.

The ballots for the annual election of President, Council, and Officers, having been scrutinized in the face of the Academy, the President reported that the following gentlemen were duly elected :---

PRESIDENT.—The Very Rev. Charles Graves, D. D.

COUNCIL .- Rev. Samuel Haughton, M. D., F.R. S; Rev. J. H. Jellett, M.A.; Robert W. Smith, M. D.; Robert M'Donnell, M.D.; William K. Sullivan, LL.D.; Joseph B. Jukes, F. R. S.; and George B. Stoney, M.A., F.R.S.: on the Committee of Science.

Rev. Joseph Carson, D. D.; John F. Waller, LL.D.; John Kells Ingram, LL.D.; John Anster, LL.D.; R. R. Madden, M. D.; and Denis F. Mac Carthy, Esq. : on the Committee of Polite Literature.

John T. Gilbert, Esq.; Rev. William Reeves, D. D.; George Petrie, LL.D.; W. H. Hardinge, Esq.; Lord Talbot de Malahide; Rev. J. H. Todd, D. D.; and Sir W. R. Wilde: on the Committee of Antiquities.

TREASURER.-Rev. Joseph Carson, D. D.

SECRETARY OF THE ACADEMY .- Rev. William Reeves, D. D.

SECRETARY OF THE COUNCIL.-John Kells Ingram, LL. D.

SECRETARY OF FOREIGN CORRESPONDENCE.-Sir W. R. Wilde, M. D. LIBRARIAN.—John T. Gilbert, Esq.

CLERK, ASSISTANT LIBRARIAN, AND CURATOR OF THE MUSEUM .- Edward Clibborn, Esq.

The names of Carl Joseph Hyrtl, of Vienna; F. Le Verrier, of Paris; and Herman Helmholtz, of Heidelberg-specially recommended by the Council as Honorary Members-were read. Whereupon it was

RESOLVED, -That the ballot be dispensed with ; and these gentlemen were declared by the President to be unanimously elected Honorary Members in the department of Science.

Pursuant to the By-laws, chap. ii., sec. 15, Major-General Edward Sabine, as President of the Royal Society of London, was declared an Honorary Member of the Academy.

His Grace the Archbishop of Dublin, having been proposed and seconded as a member of the Academy (the preliminary notice being dispensed with on privilege), was declared to be duly elected a Member of the Academy.

Sir W. R. WILDE exhibited and read the following paper on an-

ANCIENT WOODEN SHIELD FOUND IN IRELAND.

Sir W. R. WILDE, Vice-President, brought under the notice of the meeting an ancient wooden shield, and said :- During the eighty years and upwards which the Academy has been established, it has done good service to the cause of science, polite literature and antiquities in Ireland, in the original communications which it has published, the library

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which it has created, the historic manuscripts which it has preserved, and, above all, the great National Museum which, within the last thirtyfive years it has created, and that, too, on very slender means. In that Museum-containing the largest and purest collection of Celtic antiquities in the world, the truest exposition of the manners and arts of the earliest races that spread over North-western Europe, unalloyed by Roman, and but slightly tinctured by either Saxon or Frankish art,-may be read the unerring page of history in more enduring and unalterable characters, and upon more authentic materials, than in all the bardic legends that refer to the primeval occupation of this island. Here we have the rude flint weapons and stone tools of the earliest Pagan colonists; and the evidences of the metallurgic skill of their successors displayed in copper and bronze celts, swords, spears, and battle axes of surpassing beauty, and in numbers far exceeding those in any other museum in Europe. Here also have been collected the personal ornaments formed out of the precious metals, which clearly attest the taste and skill of a refined and wealthy people; and we likewise possess objects of mediæval art of unsurpassed beauty, in our ecclesiastical and ecclesiological remains, which bear witness to the piety and artistic culture of our Christian ancestors of upwards of 800 years gone by. There is scarcely an object of any kind, connected with the chase or warfare, household economy or domestic usage, the dress or decoration, the religion or sepulture of the early or middle-age people of Ireland, that is not fully and abundantly illustrated, -with one solitary exception. That exception has been the more eagerly sought for, because it is scarcely possible that warfare (a pas-time in which our Celtic ancestors specially delighted) could have been carried on with such weapons as the period produced without it, and because the written histories specially allude to its existence-I mean the shield. Some years ago a collector brought under the notice of our venerable and venerated colleague, Dr. Petrie, a small bronze shield, or covering of a shield, found among some old brass and iron in a scrap metal shop in Thomas-street, in this city, and which article was said to have come from the West of Ireland. Unfortunately it was not procured by the Academy; but fortunately it is in the possession of Lord Londesborough, a nobleman at all times willing to assist our institution; and at a future period I hope to be able to present the Academy with a model of it. His Lordship's absence in Egypt prevents my doing so on the present occasion.

During the past summer a most remarkably perfect wooden shield was discovered, ten feet deep in a turf bog, on the property of William Slacke, Esq., of Annadale, townland and parish of Kiltubride, county of Leitrim, to which gentleman the Academy is indebted for having preserved and forwarded to my care this very ancient relic of the past. It is of an oval shape; originally, when taken out of the bog, it measured $26\frac{1}{2}$ inches long, by 21 broad, and about half an inch thick; plain on the reverse side, with an indentation traversed by a longitudinal crosspiece or handle, carved out of the solid, and occupying the hollow of the

umbo or central boss on the front or anterior face. The front is carved with ribs, or raised concentric ridges, triangular in section, seven in number, and arranged in pairs, except the outward one, which is single. The conical boss, also carved out of the solid, stands 3 inches high, and measures 8 inches in the long diameter. One end of the shield is narrower than the other, but this I think is more the result of contraction of the wood towards the upper portion of the tree from which it was cut than the original intention of the artist. The boss has, likewise, been canted over to one side; but this is also in part due either to the action of the air on the drying wood, or to pressure while in the bog. Both actions may have effected this result. A very remarkable and equable indentation exists along one side of the boss in the line of the lateral diameter of the shield, which can only be accounted for in three ways: by the tool of the artist, by pressure while in the bog, or by greater shrinking of the fibrous texture of the wood at this particular point from a knot or such other circumstance. It is, however, worthy of remark, that in one of the bronze shields preserved in the Copenhagen Museum, a similar indentation presents on one side of the boss.

Professor Haughton, whom I have consulted on the subject of this curvature, is of opinion that, as in certain fossils, it is the result of pressure while in the bog; but the objection to this is, that the grain of the wood runs through on the obverse side, but has been cut obliquely by the tool of the graver in forming the ribs in front. The tilting over of the boss may, however, have been somewhat influenced by pressure.

When the shield was first taken up, and even after it came into my possession about a fortnight afterwards, it was so soft, that any firm substance could be easily passed through it; and very great care was required for many weeks subsequently, and during the process of evaporation, drying, and shrinking, to preserve its shape, and prevent its splitting. A plentiful saturation with Crewe's chloride of zinc in the first instance, and then a continuous and abundant dosing for weeks with liquid glue and litharge (such as is used by cabinet-makers for stopping cracks), while at the same time the form was retained by lateral and equally adjusted pressure, and a copper band encircling the circumference, has enabled me to preserve this very remarkable and unique specimen of defensive warfare. During the drying process it shrunk about three inches in the lateral, but only a quarter of an inch in the long diameter.

As soon, however, as the shield came into my possession, I had a very perfect piece-mould made of it, from which casts may now be obtained at a moderate cost by those interested in such matters.

The wood of which this shield is formed could only have been oak, willow, or alder. The peculiar grain of the wood, even when saturated with moisture, as well as the fact that Roderick O'Flaherty had stated in the "Ogygia," that the Irish name of the alder, as well as the letter F, was *Fearn*, because "shields are made of it," led me to decide on the last; and, without mentioning my surmises to them, I am happy to mention that my opinion has been confirmed by two of the first vegetable physiologists—Professor Oliver, of the London University, and Professor Harvey, of Trinity College; and both agree that "it is highly probable that it is the wood of the alder."

The accompanying illustration is a very faithful representation of the shield when it first came into my possession.

Ancient Irish shields are frequently mentioned in our annals and histories, and several localities take their names from shields, such as Dun-an-Sciath, the Dun or Fortress of the Shields, in the county of Tipperary, and another near Lough Ennell, in the county of Westmeath; Sciath-Ghabra, now Lisnaskea, the Fort of the Shields, in Fermanagh; Sciath-an-Eegis, on the River Bandon, in Cork; Sciath-Nachtain, near Castledermot, in Kildare; and a number of other localities of like nomenclature. In Christian times, objects emblematical of the religion of the day were displayed upon the shield, and hence the name applied to one of the O'Donnells of Donegal, of "Conall Sciath Bhackall," or Conall of the Crozier Shield, from the legend that St. Patrick inscribed with the Bhachall Jesu a cross upon the shield of that chieftain, and told him "to adopt the motto long retained by that clan of 'In hoc signo Vinces."

The word sciath, or shield, buckler, or target, is likewise applied to

the shallow wicker basket of an oval shape, and sometimes called a skib, used in the South and West for straining potatoes, and which very closely resembles both in size and form this wooden shield; and there can be very little doubt that wickerwork formed the basis of many of the shields which in former days were covered with leather. Spenser, in his "View of the State of Ireland," in 1586, when describing the arms of the Irish, refers to "their long broad shields, made but with wicker rods, which are commonly used among the said Northerne Irish, but especially of the Scots;" and in another place, "likewise round leather targets," after the Spanish fashion, "which in Ireland they use also in many places coloured after their rude fashion."

Walker, in his "Memoirs on the Arms and Weapons of the Irish," says :—"On this subject I cannot promise much satisfaction. That the shields of the early Irish were not made of metal may be safely inferred from the circumstance of there being but a single instance of a metal shield having been found in our bogs, so replete with almost every other implement of war."

It is related in Holinshed's "Chronicles," that the army led by Hasculpus against Dublin, in the time of Henry II., had round shields, bucklers, and targets, coloured red, and bound with iron. But, to go back to much older times, we have, in the metrical description of the battle of Moyteura Conga,-the details of which are, taking it with all its imperfections, the most minute of any battle fought during the Pagan occupation of Ireland,-an account of the dress and weapons of the warriors, and especially of the uses of the shield. Thus, in one of the personal combats between chieftains of the Firbolgs and Tuath-de-Danaan, it is said-" They first fought with swords till their stout shields were all shattered, and their swords bent and broken, and afterwards with lances." But one of the most remarkable notices of the shield employed in that battle, which took place on the old plain of Magh Nia, extending from Knock-Maaha, near Tuam, to the foot of Ben Leve, on the confines of Joyce Country, is the alteration of the name of that memorable locality to Moy Tureadh. The Tuatha-de-Danaan occupied the plain in front of Ben Leve, and probably extending from Cong to Kilmaine; and after some days' fighting, the Firbolgs, who were to the east, "rose out early the next morning and made a beautiful scell [or skell, a word which O'Donovan, in his translation of the poem for the Ordnance Survey, has queried a "testudo"] of their shields over their heads, and they placed their battle spears, like trees of equal thickness, and then marched forward in Turtha (?) of battle. The Tuatha-de-Danaans, seeing the Firbolgs marching forward in this wise from the eastern head of the plain, exclaimed-' How pompously these Tuirthas of battle march towards us across the plain !' and hence it was that that plain was called Magh Tuireadh, or the Plain of the Tuireadh."

From a very careful examination of this shield, I am inclined to believe that it was not covered either with leather or any metallic substance; but that it may have been painted or decorated is not improbable. The toughness and density of the alder, of which it is composed, would in itself be a firm defence against the thrusts of the swords, if not the spears, to which it was opposed. Unlike some of the ancient classic shields, through which the forearm was passed, and which were chiefly used as a protection to the body, this Irish wooden shield, grasped by the stout crosspiece underneath the umbo, could be projected to full arm's length to meet the weapon of an antagonist.

In the Leabhar-na-Garth, or "Book of Rights," we read of shields, generally equal in number to the swords which formed the tribute of the chieftains, and some of these are said to have had "the brightness of the sun." Others are described as "fair shields from beyond the seas; shields against which spears are shivered, bright shields over fine hands, shields of red colour," and "shields of valour;" and again, "golden shields," probably plated with that metal, like that gold-adorned shield said to have been found near Lismore upwards of a century ago, the bullion of which was sold in Cork for upwards of $\pounds 600$.

No conjecture can be formed as to the precise age of this antique shield; but it certainly must be of great antiquity, and is, so far as I can learn, the only perfect article of this description found either in the British Isles or on the Continent—for the remains of the wooden shield found in a barrow in Yorkshire were decorated with bronze bosses, and were encircled with an iron rim.

In the excavations recently made at Nydam Moss, in Jutland, several shields were discovered; but, according to the account given of these diggings, "they were so thin and soft that not one was taken up whole." These shield boards are said to have been of oak, maple, or ash; but we have no botanical opinion upon the subject, and I doubt whether the ash grew in Jutland at the period to which these articles have been referred.

I am indebted to my friend, Mr. Franks, of the British Museum, for some notes respecting the shields found in England and Scotland; but this, as well as a communication from Dr. Petrie, will more appositely apply to the Irish bronze shield in Lord Londesborough's collection, and of which I expect to be able to present a model to the Academy very soon. In the meantime I must refer to Mr. Franks' illustrations and descriptions of British shields, in that beautiful work, the "Horæ Ferales," of my late friend, John Mitchell Kemble.

In the Academy's Museum may be seen a collection of seven embossed circular thin brass plates, one of which I have figured at p. 637 of the Catalogue, and stated my belief that it formed part of the decoration of a shield. Such, it appears, is also the opinion of Mr. Franks, who has figured a similar article in the "Horæ Ferales."

The Rev. Professor Haughton, in illustration of the effect produced upon the shape of the shield by its position in the bog under pressure, exhibited and described drawings of certain fossil remains found in Ireland which owe their peculiar shape to the circumstance of pressure.

Sir W. R. Wilde exhibited and described the shrine of St. Manchan, or Monahan, of Leigh, together with a fac-simile model of it which had lately been made for the Museum; and also a restoration of the shrine which he had had constructed for the Kensington Museum.

The President under his hand and seal nominated the following VICE-PRESIDENTS.—Rev. J. H. Jellett, A.M.; John F. Waller, LL.D.; George Petrie, LL. D.; and Lord Talbot de Malahide.

The Academy then adjourned.

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- Waller, John F., LL. D., member of Council (Com. of Polite Lit.) in 1862, 117; in 1863, 305; in 1864, 487; Vice-President, 493.
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- Wilde, Sir William R., member of Council (Committee of Antiq.) in 1862, 117; in 1863, 305; in 1864, 487; Vice-President, 305; Secretary of Foreign Correspondence, 487; on antique gold ornaments found in Ireland prior to 1747, 82; catalogue of gold articles in the Museum, 89; description of a crannog in the county of Cavan, 274; on antiquities presented by the Board of Works, 324; on the gold articles added under the treasure-trove grant, 406; on an ancient Irish shield, 487; on the shrine of St. Manchan, 493; presentations through, 153, 289, 428.
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CORRIGENDA.

Page 409, for Dr. R. Keller, read Dr. F. Keller.

- " 457, line 23, for Foill, read Foill.
- 458, " 28, for Blythe, read Blyth. ,,
- " 487, " 10, for George B. Stoney, read George J. Stoney.
- " 487, Com. Pol. Lit., insert Rev. George Longfield, B. D.

END OF VOLUME VIII.

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