from stigmatic and from typical anthers being used, but in no case did seed set. Very few capsules were found with seed this last season, however, on untreated plants. In the spring of 1913 search was made for flowers with stigmatic anthers. Of 305 flowers examined from a woodlot which comprised about five acres, there were only 13 with stigmatic anthers. Twelve were found in a patch about 10 ft. square and a single specimen 100 ft. distant. A single flower with stigmatic anthers, however, had been found the previous year about 200 yards from the patch just mentioned. Some few of the flowers classed as normal had rudimentary pistils though normal stamens. One hundred and thirty-two flowers from outside this woodlot were found to be normal. The total number is not sufficient to warrant one in making a suggestion as to the probability of the abnormal form having originated in this single locality.

The transformation of stigmas into anthers seems to completely block the possibility of fertilization, for the ovules which are laid down in deformed pistils have never been found to develop. The abnormality described, therefore, has a double interest. It not only shows an alteration in the products of an organ with a highly stereotyped sexual development, but it also offers an instance apparently of a mutation directly unfavorable to the reproduction of the species. In consequence the subject has seemed worthy of further investigation and the present note is to call attention of botanizers this spring to the possible occurrence of the abnormality in other localities. We should be glad to correspond with any one finding abnormal flowers of the bellworts.

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## SOCIETIES AND ACADEMIES

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

AT the 470th regular meeting of the society held December 16, 1913, James Mooney, of the Bureau of American Ethnology, delivered an ad-

dress on "The Gaelic Factor in the World's Population." The speaker dealt chiefly with the Irish Gaels and drew a distinction between the Irish of native Gaelic stock and the unassimilated alien element massed in several of the northeastern counties as the result of the "Plantations'' under James I. and Cromwell. This alien element was of English and Lowland Scotch stock, with a slight Highland Gaelic infusion, Protestant in religion and mostly Unionists in politics, while those of the old native stock were as solidly Catholic and Nationalist. Speaking broadly, in Ireland the Catholics represent the original Gaelic stock; the Episcopalians, those of English stock, and the Presbyterians and Methodists, those of Scotch origin, constituting respectively about 74, 13 and 11 per cent. of the total population. The present Gaelic race of Ireland is a blend of the Gael proper, a Keltic people who arrived in the country probably from northern Spain about 1,000 B.C., and of all other races who preceded or followed them up to the end of the thirteenth century, including the neolithic man, the unknown megalith builders, the dark-haired Firbolg, the Picts, Danes, Normans and Welsh. The Irish immigration to the American colonies previous to the Revolution was mainly of the alien Scotch and English element, known sometimes as Scotch-Irish. The Gaelic Irish immigrants did not begin to arrive in any great number until after the war of 1812, excepting in Maryland.

The wars growing out of the Reformation and the Stuart contests reduced the Irish race from an estimated two and a half million in 1560 to about 960,000 at the end of the Cromwellian war in 1652. In 1845 it reached its maximum estimate of 8,500,000. Then came the great famine of 1846-47. Within three years nearly 1,500,000 perished of hunger or famine fever. This started the great flood of emigration by which Ireland has lost virtually one half its population within sixty years. In 1911 it stood at 4,390,219, the lowest point reached in over a century. Owing to governmental and economic conditions this decrease has been chiefly at the expense of the old native Gaelic stock rather than the Planter stock, the Gaelic percentage, as indicated by the religious statistics, having fallen from 83 to 74. In the sixty years ending March 31, 1911, according to the official British figures, 4,191,552 emigrants left Ireland, or nearly as many persons as are now living in the country. About three million of these came to the United States, the total Irish immigration to this country from 1821 to 1900 being, officially, 3,871,253. From 1821 to 1850 the Irish constituted nearly one half of all our immigrants. Previous to the Revolution the "Scotch-Irish" immigration was so great than in an official Parliamentary inquiry in 1778 it was asserted that nearly one half of the American Revolutionary Army was of Irish origin. Since 1870 the number of Irish-born in the United States has steadily decreased, by death and dwindling immigration. According to the census of 1910 there are now in the United States of Irish birth or parentage, 4,504,360. This does not include any of the 811,000 non-French Canadians in the United States, of whom a large proportion are of Irish blood, or any of the 876,000 coming from England, of whom also a large number are of Irish origin. Neither does it include any of the 1,177,000 American born "of mixed foreign parentage," including such parentage combinations as Irish and Germans, which alone probably runs above fifty thousand. Among the states, New York stands first with 1,091,000 of Irish birth or parentage; Massachusetts second, with 633,000, and Pennsylvania third, with 570,000. For all these figures it may be asserted that more than four fifths are of Gaelic stock.

By the latest British census, 1911, the population of Ireland was 4,390,219, of whom all but 157,037 were native born. Of the native born about 74 per cent. or 3,245,000 represent the old Gaelic stock. By the same census there were 375,-325 persons of Irish birth then living in England and Wales, while an unofficial estimate puts those in Scotland at about 220,000 or nearly 600,000 for the whole island, which with the children of Irish parentage would probably total at least 1,500,000. The same census gives 139,434 Irish born to Australia, or perhaps 350,000 of Irish blood. South Africa and the other British colonies, exclusive of Canada, have (estimated) 100,000 of the same stock, while Canada has in round numbers 990,000 of Irish birth or parentage, of whom about 750,000 are of Gaelic origin, as indicated by religious denomination. Outside the countries already named, Argentina has some 15,000 Irish born and the rest of Latin America possibly as many more, with perhaps another 15,000 or 20,000 scattered over the rest of the world. To sum up, the total Irish-born population throughout the world is now about 6,875,000, or about 1,625,000 less than the population of the home country alone in 1845, while the whole number of unmixed Irish blood may be about seventeen million, of whom nearly fifteen million are of Gaelic stock. The total Gaelic population—Irish, Scotch and Manx—of fairly pure stock and racial identity, in every part of the world, probably numbers close to twenty million.

AT a special meeting of the society held on January 6, at the National Museum, Dr. Truman Michelson, of the Bureau of American Ethnology, delivered an address, "Notes on the Fox Indians of Iowa." Their own native name is Meskwa'ki'Ag', "Red-Earths"; the French name, les Renards, is derived from the appellation of a single gens, Wāgō'Agi, "Foxes"; the English name "Foxes" is a translation of the French les Renards; the term "Outagamies" (and variants) is derived from the Ojibwa Utagāmīg, "they of the other shore." Their closest linguistic relations are first with the Sauk, then the Kickapoo, then the Shawnee, and then the so-called Abnaki tribes. They are also comparatively close to the Menominee and Cree as compared with the Ojibwa, Otawa and Potawatomi. The thesis that the Foxes were once an Iroquoian people and subsequently took up an Algonquian dialect can not be substantiated. There is presumptive evidence that the Foxes were once in the lower Michigan peninsula. However their proper history begins in the last half of the seventeenth century in Wisconsin on the Wolf and Fox rivers. After the famous Black Hawk war, the Sauks and Foxes sold their remaining lands in Iowa and agreed to remove to Kansas. Nevertheless small bands of the Foxes returned continually to Iowa. In 1856 the Iowa legislature passed a bill enabling the Foxes to settle in that state. Accordingly they purchased land with their own money, near Tama, Iowa. From time to time this has been added to till they now own about 3,000 acres. The main body of the Foxes did not leave Kansas till the outbreak of the Civil War. In 1896 the state of Iowa relinquished jurisdiction of the Foxes to the federal government, and at the same time certain claims of the Foxes against the Sauks were adjusted. There are some Foxes enrolled with the Sauks of Kansas and Oklahoma; the present population of those in Iowa is about 356.

AT the 471st meeting of the society, held January 20, 1914, at the National Museum, Mr. William H. Babcock spoke on "The North Atlantic Island of Brazil," illustrating his address with lantern slides of early maps. Attention was called to three Brazils, that of South America, the Mount Brazil in Terceira and that of the western Ireland peasantry who still believe in a great land called Brazil or Breasail west of them in the

This last is probably the original Brazil. ocean from which the others received the name, it being identical with that of a mythical pagan Irish hero and also practically with that of St. Bresal. Outside of Ireland it first appears in the expression "grana de Brasile"-grain of Brazil-in a commercial treaty of Ferrara, Italy, dated 1193, and another Italian document of 1198. The speaker suggested that the primary Brazil, west of Ireland, may have been the region surrounding the Gulf of St. Lawrence. The maps of Dalorto 1325 and Dulcert 1339 were presented as the first showing Brazil, a nearly circular figure west of southern Ireland. The corroborative testimony of the Norse sagas as to Great Ireland and the opinion of Dr. Storm and Dr. Fisher identifying Brazil with Markland are best supported by the Catalan map of 1480. The general argument was that some who spoke Irish reached the St. Lawrence Gulf region at a very early period and gave it the name

AT a special meeting of the society held February 3 at the National Museum, Miss Frances Densmore, of the Bureau of American Ethnology, read a paper on "Sioux War Songs," using the stereopticon, the phonograph and vocal selections in illustration of her theme. A number of native drawings of war incidents were shown. War among Indians was not an occasional calamity, it more nearly resembled a steady occupation. To the individual it offered a career. A man could best become rich and honored by going to war. A man was rated according to his generosity, and having given away his goods there must be some way of securing a new supply of wealth. A war party afforded this opportunity. War was a means of revenge, was for the defence of the home and was the protection of the hunting ground which meant the food supply. A war party traveled far and brought back strange tales of distant lands. New customs were frequently introduced into the tribe as a result of war expeditions or the taking of captives. Only a successful warrior could belong to the leading societies of the tribe, with their special tents for meeting, their feasts and their parades. But the greatest reward was the right to sing of one's valor at the assemblages of the tribe.

> DANIEL FOLKMAR, Secretary

## THE NEW ORLEANS ACADEMY OF SCIENCES

THE annual meeting of the Academy was held in Tulane University on Tuesday, March 17, with President Dr. Isadore Dyer in the chair and a full quorum of fellows and members. The following resolutions were passed upon the death of Dr. Alcee Fortier:

WHEREAS, By the death of Dr. Alcee Fortier the New Orleans Academy of Sciences has lost one of its oldest fellows, one who took an active part in the reorganization of the Academy in 1886, was its corresponding secretary from 1886 to 1890, and published a valuable contribution on Romance Philology in the proceedings of 1888,

Resolved, That we, the fellows and members of the New Orleans Academy of Sciences, do hereby express our sincere appreciation of his most valuable services to this organization, not only in his official capacity as secretary, but also as a scholarly contributor to its proceedings and furthermore our deep sense of the loss which the Academy has sustained by his death.

*Resolved* furthermore, that a copy of these resolutions be incorporated in the minutes of the Academy and that copies also be sent to his family, to SCIENCE and to the press of this city.

Officers for the ensuing year were elected as follows:

President-W. B. Gregory, professor of experimental engineering, Tulane University.

First Vice-president-Gustav Mann, professor of physiology, Tulane University.

Second Vice-president-W. A. Read, professor of English, Louisiana State University.

Secretary-R. S. Cocks, professor of botany, Tulane University.

Treasurer-Ann Hero, professor of chemistry, Sophie Newcomb Memorial College.

Librarian-Curator-J. H. Clo, professor of physics. Tulane University.

Corresponding Secretary—Pierce Butler, professor of English, Sophie Newcomb Memorial College.

The scientific program consisted of the following papers: (1) "Some Theories of Valence," by H. W. Moseley. The paper traced the development of the doctrine of valence from a historical Some of the modern theories were view-point. then taken up in more detail, especially the theories of Abegg, Spiegel and Arrhenius, Ramsay, Friend, Thompson and Werner. The paper closed with mentioning some recent observations of Bray and others upon valency and tautomerism. The paper was discussed by Dr. P. B. Caldwell. The second paper was by R. S. Cocks calling attention to several interesting facts connected with plant distribution in Louisiana, dealing especially with the eastern portion of the state.

> R. S. Cocks, Secretary

Brazil.