given the Maori name Huia, and was regarded as the honorary chief of a Maori tribe. Queen Victoria became his godmother. Favored by circumstance, strong and handsome, he passed through Eton and Cambridge University, with every prospect of a brilliant career. But when taking a holiday in the Tyrol in July, 1911, he struck his head against a rock in diving, and was so severely injured that he became paralyzed from the waist downward. An apparently helpless invalid, he was condemned to spend the rest of his life on a couch, able only to move his head and arms. Many men, so situated, would have given up all idea of useful activities, lamenting a life of supposedly unavoidable idleness. Not so Mr. Onslow. Having been much interested in biological subjects when in college, he returned to Cambridge, secured the necessary assistants, and ardently devoted himself to biological research. Those interested in genetics will remember his papers on heredity in moths, based on breeding experiments carried on in his laboratory. His doubtless most important work, of 74 pages, was "On a periodic structure in many insect scales, and the cause of their iridescent colours" (*Philosophical Transactions of the Royal Society,* July, 1921). In this elaborate and fully illustrated paper the iridescent colors of many insects of various orders are studied, using all the modern refinements of microscopic technique and the latest pertinent researches in physics. All the drawings on the three plates are by Mr. Onslow. A few years ago Mr. Onslow was married to Miss Muriel Wheldale, formerly a fellow of Newnham College, well-known for researches on biochemistry and especially for her book on the anthocyanin pigments of plants. Marriage did not prevent her from continuing her work at the university, and so Onslow lived, as he wished to do, in the atmosphere of the laboratories, closely in touch with whatever was going on, himself an actor in the great scientific drama of the day. When I saw him in 1920 I was struck by the keenness of his mind and the breadth of his interests. His was a remarkable life, fruitful in many ways, and ever worthy to be remembered.

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SCIENTIFIC EVENTS

ILLUMINATING ENGINEERING NOMENCLATURE AND PHOTOMETRIC STANDARDS

THE American Engineering Standards Committee announces that the Illuminating Engineering Nomenclature and Photometric Standards of the Illuminating Engineering Society, 1918 edition, have been approved by the American Engineering Standards Committee as "American Standard," with the substitution of six internationally agreed upon definitions for certain ones of the 1918 rules. The definitions which have been reworded are: luminous flux, luminous intensity, illumination, candle, lumen and lux.

The special committee of the American Engineering Standards Committee which examined the proposal submitted by the Illuminating Engineering Society and which recommended approval of the nomenclature and photometric standards included representatives of the U. S. Bureau of Standards, the American Gas Association, the American Physical Society, the International Acetylene Association, the Optical Society of America, the American Institute of Electrical Engineers, the Illuminating Engineering Society and the National Electric Light Association.

The new tests to be substituted for existing text in sections 3, 8, 9, 10, 12 and 13 of the Nomenclature and Standards Rules of the Illuminating Engineering Society of 1918 are as follows:

Section 3: Luminous Flux is the rate of flow of radiant energy evaluated with reference to visual sensation. Although luminous flux must strictly be defined as above, it may be regarded for practical photometric purposes as an entity, since the rate of flow is for such purposes invariable.

Section 8: The Luminous Intensity of a point source in any direction is the flux per unit solid angle emitted by the source in that direction. (The flux from any source of dimensions which are negligibly small by comparison with the distance at which it is observed may be treated as if it were emitted from a point.)

Section 9: Illumination at any point of a surface is the luminous flux density at that point, or, when the illumination is uniform, the flux per unit of intercepting area.

Section 10: The unit of Luminous Intensity is the International Candle, such as has resulted from international agreement between the three national standardizing laboratories[1] of France, Great Britain and the U. S. A. in 1909.

This unit has been conserved since then by means of incandescent electric lamps in the laboratories which continue (or remain) charged with its conservation.

Section 12: The unit of Luminous Flux is the Lumen. It is equal to the flux emitted in a unit solid angle, by a uniform point source of one international candle.

Section 13: The practical unit of illumination is the Lux. It is equal to one Lumen per square meter, or it is the illumination at the surface of a sphere of one meter radius due to a uniform point source of one international candle placed at its center.

As a consequence of certain recognized usages, the illumination can also be expressed by means of the following units:

Using the centimeter as the unit of length the unit of illumination is one lumen per square centimeter, and is called the Phot. Using the foot as the unit of length, the unit of illumination is one lumen per square foot, and is called the Foot-Candle.

FRENCH VITAL STATISTICS FOR 1921[1]

THE secretary (minister) of labor recently published the official vital statistics for France for the year 1921. It is an unfavorable report from every point of view. The number of births is below that of 1920, while the number of deaths has increased; the number of marriages has also decreased. The excess of births over deaths, amounting to 159,790 in 1920, or forty-one for each 10,000 inhabitants, decreased in 1921 to 117,023, or thirty for each 10,000 inhabitants.

A comparison of the number of births and deaths for the years 1921, 1920 and 1913 is shown in the following table:

Year	Total Population	Births	Deaths	Excess of Births
1921.....	39,209,766	813,396	696,373	117,023
1920.....	39,209,766	834,411	674,621	159,790
1913.....	41,476,272	790,355	731,441	58,914

The number of marriages, which reached an unusually high figure in 1920 (623,869), dropped in 1921 to 456,221, but it is still appreciably higher than the number recorded in 1913 (312,036).

An examination of the report brings out the fact that whereas the number of living births for each 10,000 inhabitants in 1920 was 213, it fell in 1921 to 207; in 1913, it was 191. The relative proportion of deaths has risen from 172 for each 10,000 inhabitants in 1920 to 177 in 1921, reaching about the same proportion that was recorded in 1913—176 for each 10,000 inhabitants.

In 1921, sixty-seven of the French departments showed an excess of births over deaths, the total amounting to 127,654, as compared with seventy-three departments in 1920. On the other hand, twenty-three departments showed an excess of deaths over births, the total amounting to 10,631, as against seventeen departments in 1920. The seven departments which, in 1920, showed an excess of births over deaths but in which the balance in 1921 was on the side of the deaths are: Aube, Cher, Côte-d'Or, Maine-et-Loire, Orne, Seine-et-Marne and Seine-et-Oise. In the department of Isère, which in 1920 showed an excess of deaths over births, the excess of births over deaths in 1921 was 292. During the year just preceding the war (1913), an excess of births over deaths amounting to a total of 86,768 for fifty-two departments was recorded, and an excess of deaths over births amounting to 27,854 was found in the thirty-eight other departments.

The departments in which the excess of births over deaths, in 1921, reached the highest figures are: Nord, Seine, Pas-de-Calais, Finistère, Moselle, Bas-Rhin, Seine-Inférieure, Côtes-du-Nord, Morbihan, Haut-Rhin, Aisne, Meurthe-et-Moselle, Ardennes and Bouches-du-Rhône. In all these departments, with the exception of Aisne, Meurthe-et-Moselle and Ardennes, the excess of births in 1921 was much less than in 1920.

The departments in which the excess of deaths over births, in 1921, was highest are: Yonne, Var, Gers, Lot, Lot-et-Garonne, Maine-

[1] These laboratories are the Laboratoire Central d'Electricité, Paris, the National Physical Laboratory, Teddington, and the Bureau of Standards, Washington.

[1] From the *Journal* of the American Medical Association.