doubtless asked them if the word meant war, and, receiving a negative reply, he at once inferred that as it must be an archaic word for war its signification had been forgotten by the Indians; for was it not still the component element in a compound meaning war and warrior? This inference, however, was erroneous.

Since it is compounded with the verb-stem *-keq-te'*, it must like *on du'-ta'* signify something which had to be borne on the back by the warrior. Under the heading, "Meubles, mesnages, outils," i. e., "Family or household goods, tools, etc.," Fr. Gabriel Sagard, in his "Dictionnaire de la Langue Huronne" (1632), wrote "Ballet, *Oscoera.*" In the fifth edition of the "Dictionnaire de l'Academie Francoise," Paris, 1825, there are two forms of the word "ballet" given; one of these is "balle," signifying a large pack of goods, bound with cords, and wrapped in coarse linen cloth, and the other is "ballot," meaning a large pack or bundle of family or household goods. The word bale is evidently the correct rendering of this word. But it is very improbable that a bale as such formed a part of the family and household goods and tools of the early Hurons. It is likely, however, that *oscoera* signified a mat woven from the common Indian hemp (Apocynum Cannabinum), and thus merely a form of the modern Mohawk, and perhaps proethnic, *oska'ra'*, flax, hemp, tow, the Tuskarora form of which is *u'-ska-rĕ*, meaning shawl, blanket, bedding, bed-cover, whatever is spread to lie upon; being found in *yă-çka-re$^{n'}$-kua'*, "one uses it to spread," which is a descriptive name of a carpet. Father Bruyas (on page 115, op. cit.) has "*Gentskaron*, estendre, mettre la natte," i. e., to spread or lay the mat or mattress; and "*Gentskare*, S. natte, avoir une natte," i. e., a mat, to have a mat, mattress. Père Pierre Potier (op. cit.) has "*kaskara*, tout ce qui sert à coucher," i. e., all that which is used for bedding. It is thus seen that the noun-stem *-skar-* has the same meanings that *-ndut-*, the stem of *on-du'-ta'* has, but it has a wider application in the modern vocabulary. There is no attempt made here to connect these stems etymologically, but a similar sematologic development only is shown in the two stems.

The stem of *ka ske^{n}'ra'* is *-ske^{n}'-r-* or better *-ske^{n}'r-*. In the stems *-skar-* and *-ske^{n}'r*, we have two generic noun-stems, having the same consonnatic sounds, sustaining one to the other the same positions in the two stems respectively, but differing in the interconsonantic vowel which vocalizes them. Nevertheless, it is assumed that these two stems are derived from one and the same proethnic source. It is clear that the stem *-skar-* is the older form, in that it is the simpler of the two. The change of the mid-stem vowel *a* to *e^{n}* is explained by the presence of the "interrupted explosive," represented by an apostrophe before a following *r* and by the presence of a *k* immediately before the vowel changed. The cause of the change was the "interrupted explosive," which became a part of the stem by analogic metathesis, a procedure which is not unknown in this language. So that there exists no formidable phonetic difficulty in the way of regarding the two stems *-skar-* and *-ske^{n}'r-* as derivatives from one and the same proethnic form, having the meanings possessed by the stem *-skar-*, already given above. Thus, it appears that *ka-ske^{n}'ra'* meant a mat or mattress; and this is the meaning which is absolutely required by the verb stem *-keq-te'* with which it is compounded.

Thus, both the compound-stems *-ske^{n}'-ra keq-te'* and *-ndu-ta-keq'-te'* were denotive of a custom of the Iroquoian warrior when on the war-path. The pronominal prefixes have been suppressed for brevity's sake. Prefixing the pronoun of the third person masculine singular of the anthropic gender, *ro-*, to the first, we have *ro-ske^{n}'-ra-keq'-te'*, "he bears a mat on the back;" and *ho-*, a dialectic form of *ro*, to the other we have *ho ndu-ta-keq'-te'*, he "bears a mat on the back." So that in the baldest English a warrior was a "mat — or mattress — bearer," in the tongues of the Iroquoian peoples.

J. N. B. HEWITT.

Washington, D. C., March 15.

FORTHCOMING SCIENTIFC BOOKS.[1]

THE following is a list of scientific works which will be issued by various English publishers in the course of the spring: —

Messrs. Macmillan & Co. — "Essays on some Controverted Questions," with a Prologue, by Professor Huxley; "The Beauties of Nature," by Sir John Lubbock, F.R.S., illustrated; "Island Life, or The Phenomena and Causes of Insular Faunas and Floras," including a revision and attempted solution of the problem of geological climates," by A. R. Wallace, with illustrations and maps, new and cheaper edition; "The Apodidæ," a morphological study, by Henry M. Bernard, illustrated (Nature Series); "Experimental Evolution," by Henry de Varigny; "The Diseases of Modern Life," by B. W. Richardson, F.R.S., new and cheaper edition; "The Geography of the British Colonies" — "Canada," by George M. Dawson, "Australia and New Zealand," by Alexander Sutherland (Macmillan's Geographical Series); "Scientific Papers," by Oliver Heaviside; "The Algebra of Co-Planar Vectors and Trigonometry," by R. B. Hayward, F.R.S., assistant master at Harrow; "Key and Student's Companion to Higher Arithmetic and Elementary Mensuration," by P. Goyen, inspector of schools, Dunedin, New Zealand; "Arithmetic for Schools," by Barnard Smith, late fellow and bursar of St. Peter's College, Cambridge, carefully revised in accordance with modern methods by W. H. H. Hudson, professor of mathematics, King's College, London; "Blowpipe Analysis," by J. Landauer, authorized English edition by J. Taylor and W. E. Kay of the Owens College, Manchester, new edition, thoroughly revised with the assistance of Professor Landauer; "Nature's Story Books," I., "Sunshine," by Amy Johnson, illustrated.

The Clarendon Press. — "Mathematical Papers of the late Henry J. S. Smith, Savilian Professor of Geometry in the University of Oxford," with portrait and memoir, two volumes; "Plane Trigonometry without Imaginaries," by R. C. J. Nixon; "A Treatise on Electricity and Magnetism," by J. Clerk Maxwell, new edition; "A Manual of Crystallography," by M. H. N. Story-Maskelyne; "Elementary Mechanics," by A. L. Selby; "Weismann's Lectures on Heredity," Vol. II., edited by E. B. Poulton, F.R.S; "Epidemic Influenza," by F. A. Dixey.

The Cambridge University Press. — "A Treatise on the Mathematical Theory of Electricity," by A. E. H. Love, fellow of St. John's College, Cambridge, two volumes, Vol. I. in the press; "The Origin of Metallic Currency and Weight Standards," by W. Ridgeway, professor of Greek, Queen's College, Cork, and late fellow of Gonville and Caius College; "Solutions of the Examples in 'A Treatise on Elementary Dynamics,'" by S. L. Loney, formerly fellow of Sidney Sussex College, Cambridge.

Messrs. Longmans & Co. — "Darwin and after Darwin: an Exposition of the Darwinian Theory, and a Discussion of Post-Darwinian Questions," by George John Romanes, F.R.S., two volumes.

Messrs. A. & C. Black. — "Life in Motion, or Muscle and Nerve," a series of lectures delivered at the Royal Institution, Christmas, 1891, by John Gray McKendrick, F.R.S., illustrated.

Messrs. J. & A. Churchill. — "A Treatise on Hygiene," edited by Thomas Stephenson and Shirley F. Murphy, in two volumes, with numerous illustrations, Vol. I. nearly ready; "Chemical Technology, or Chemistry in its Applications to Arts and Manufactures," edited by Charles E. Groves, F.R.S., and William Thorp (with which is incorporated "Richardson and Watts's Chemical Technology"), Vol. II. "Lighting: Fats and Oils, Candles, Stearine, Gas, Electric Lighting;" "Materia Medica, Pharmacy,

[1] From Nature.

Pharmacology, and Therapeutics," by W. Hale White; "The Student's Guide to Diseases of the Nervous System," by J. A. Ormerod, with 66 illustrations; "A Dictionary of Psychological Medicine, giving the Definition, Etymology, and Synonyms of the Terms used in Medical Psychology, with the Symptoms, Pathology, and Treatment of the Recognized Forms of Mental Disorder, together with the Law of Lunacy in Great Britain and Ireland," in two volumes, edited by D. Hack Tuke.

Messrs. Whittaker & Co.—New volumes of the Specialists' Series—"Lightning Conductors and Guards," by Oliver J. Lodge, F.R.S., with numerous illustrations; "The Dynamo," by C. C. Hawkins and F. Wallis, with numerous original diagrams; "A Guide to Electric Lighting," by S R. Bottone, for householders and amateurs, with 77 illustrations. Whittaker's Manual Instruction Series—"Manual Instruction: Woodwork," by S. Barter, Organizer and Instructor for the London School Board, and to the Joint Committee on Manual Training of the School Board for London, the City and Guilds of London Institute, and the Worshipful Company of Drapers, with over 300 illustrations; "Leather Work, Stamped, Moulded, and Cut, Cuir-Bouillé, Sewn, &c.," by Charles G. Leland, author of "Wood Carving," with numerous illustrations. Whittaker's Library of Popular Science—"Mineralogy," by Dr. F. Hatch, with numerous illustrations; "Chemistry," by T. Bolas with many illustrations.

Messrs. Sampson Low & Co.—"Answers to the Questions on Elementary Chemistry, Theoretical and Practical (Ordinary Course), set at the Examinations of the Science and Art Department, South Kensington, 1887 to 1891," by John Mills, two vols., fully illustrated; "Chemistry for Students, consisting of a Series of Lessons based on the Syllabus of the Science and Art Department, and specially designed to facilitate the experimental teaching of Elementary Chemistry in Schools and Evening Classes," by John Mills, numerous illustrations; "Decorative Electricity," by Mrs. J. E. H. Gordon, with a chapter on Fire Risks by J. E. H. Gordon, and numerous illustrations by Herbert Fell, engraved on wood by J. D. Cooper; "Examination of Soils," by W. T. Brannt.

Messrs. George Philip & Son.—"Makers of Modern Thought; or, Five Hundred Years' Struggle (A. D. 1200 to A D. 1699) between Science, Ignorance, and Superstition," by David Nasmith, in two volumes; "Christopher Columbus," by Clements R. Markham, Vol. VII. of "The World's Great Explorers and Explorations"; "The Development of Africa," by Arthur Silva White, new and cheap edition, revised to date, with fourteen colored maps; "Philips' General Atlas," entirely new and revised edition, with several additional maps; "Philips' Systematic Atlas," for higher schools and general use, a series of physical and political maps of all the countries of the world, with diagrams and illustrations of astronomy and physical geography, specially drawn by E. G. Ravenstein; "Philips' Atlas of Astronomy," a series of seventy-two plates, with notes and index by Sir Robert Stawell Ball, F.R.S., Royal Astronomer of Ireland; "Tourists' Handy Volume Atlas of Europe," a series of colored maps, with notes, plans of cities, and complete consulting index, by J. G. Bartholomew.

Messrs. Swan Sonnenschein & Co.—"Animal Coloration," by Frank Beddard, Prosector to the Zoological Society, with four colored plates by P. J. Smit, and numerous wood-cuts; "Text-book of Embryology: Man and Mammals," by Dr. Oscar Hertwig, of the University of Berlin, translated and edited from the third German edition by Dr. E. L. Mark, Professor of Anatomy in Harvard University, fully illustrated; "Text-book of Embryology: Invertebrates," by Drs. Korschelt and Heider, of the University of Berlin, translated and edited by Dr. E. L. Mark, Professor of Anatomy in Harvard University, and Dr. W. M. Woodworth, Assistant Professor in Harvard University, fully illustrated; "Text-book of Geology," adapted from the work of Dr. Kayser, Professor in the University of Marburg, by Philip Lake, of St. John's College, Cambridge, fully illustrated; "The Geographical Distribution of Disease in England and Wales," by Alfred Haviland, with several colored maps; "A Treatise on Public Hygiene and its Applications in different European Countries," by Dr. Albert Palmerg, translated, and the English portion edited and revised, by Arthur Newsholme, fully illustrated; "The Photographer's Pocket-book," by Dr. E. Vogel. "Introductory Science Text-Books," additions—introductions to the study of "Zoology," by B. Lindsay, illustrated; "The Amphioxus," by Dr. B. Hatschek, of the University of Vienna, and James Tuckey, of the University of Durham, illustrated; "Geology," by Edward B. Aveling, Fellow of University College, London, illustrated; "Physiological Psychology," by Dr. Th. Ziehen, of the University of Jena, adapted by Dr. Otto Beyer, with twenty-two figures.

Messrs. Crosby Lockwood & Son.—"A Hand-book of Brewing, a Practical Treatise for the use of Brewers and their Pupils," by Herbert Edwards Wright; "A Treatise on Earthy and other Minerals and Mining," by the late D. C. Davies, third edition, revised and very considerably extended by his son, E. H. Davies; "Fuels: Solid, Liquid, and Gaseous, their Analysis and Valuation," for the use of chemists and engineers, by H. J. Phillips, second edition, revised and much enlarged.

LETTERS TO THE EDITOR.

*** Correspondents are requested to be as brief as possible. The writer's name is in all cases required as proof of good faith.*

On request in advance, one hundred copies of the number containing his communication will be furnished free to any correspondent.

The editor will be glad to publish any queries consonant with the character of the journal.

The Bacillus of Influenza.

IN consequence of the inaccuracy of two articles which have recently appeared in *Science* on the subject of the bacillus of influenza, the undersigned considers it necessary to give the following detailed abstract of the preliminary publications which have appeared this year in the *Deutsche Medicinische Wochenschrift* regarding the isolation and cultivation of this organism, and its relation to the disease.

The bacillus of influenza was no doubt observed by Babes in 1890, but he describes a variety of other organisms as occurring in influenza, and his communications [1] [2] show no more evidence than those of other authors of his having proved this or any other organism, to be peculiar to the disease. To the simultaneously published observations of Pfeiffer,[3] Kitasato,[4] and Canon,[5] we must look for definite information on this subject, and to them most certainly is due the credit of discovery.

Where the bacillus of influenza is found. The bacilli are found in large numbers in the sputa and bronchial secretion of those who are suffering from influenza, and also to a greater or less extent in the blood. The bacilli in the sputa have been obtained in pure culture after a new method by Kitasato, and, according to Pfeiffer, their number in sputa bears a direct relation to the progress of the disease, the bacilli disappearing together with the purulent bronchial secretion. Pfeiffer suggests, in view of this fact, that the sputa be regarded as infectious material. This author examined the purulent bronchial secretion of thirty-one cases of influenza, and in all found the bacillus, which will presently be described. In uncomplicated cases of influenza pure cultures of the organism were obtained. He reports six autopsies, in two of which he obtained pure cultures. The bacilli occur in enormous numbers and frequently are observed in the pus cells. The examination of the lungs showed that the bacilli penetrate from the bronchi into the peri-bronchial tissue and may even attain the pleural surface, where, in two of the autopsies the bacilli were obtained in pure cultures from the exsudate on the surface of the pleura. In almost every one of twenty cases examined by Canon the characteristic bacilli were observed to be present in the blood (see further under staining). He usually found four to twenty isolated bacilli in each cover-glass preparation. In six cases where

[1] Babes, V., Vorläufige Mittheilungen ueber einige bei Influenza gefundene Bakterien (Feb. 17-May 3). Centralbl f. Bakteriol., 1890, vol. vii., pp. 233-241, 460-464, 496-502, 533-538, 561-568, 598-606 (with six photographs).

[2] Babes, V., Ueber die bei Influenza gefundene feinen Bakterien (Feb. 11). Deutsche Med. Wochenschr., 1892, No. 6, pp. 113-115.

[3] Pfeiffer, R., Vorläufige Mittheilungen ueber die Erreger der Influenza (Jan. 14). Deutsche Med. Wochenschr., 1892, No. 2, p. 28.

[4] Kitasato, S., Ueber den Influenzabacillus und sein Culturverfahren (Jan. 14). Deutsche Med. Wochenschr., 1892, No. 2, p. 28 (reported to the Society of Charité Physicians, Jan. 7).

[5] Canon, P., Ueber einen Mikroorganismus im Blute von Influenzakranken (Jan. 14). Deutsche Med. Wochenschr, 1892, No. 2, pp. 28-29.