

TABLE VII

Name of source journal	Per cent. of references to serials published outside the United States and Canada			
	1928	1929	1930*	1928- 1930
<i>Am. J. Sci.</i>	31.1	30.5	29.3	30.2
<i>Am. Mineral.</i>	36.0	55.6	35.8	42.7
<i>Bull. Am. Ass. Petroleum Geol.</i>	18.1	10.6	10.5	12.2
<i>Bull. Geol. Soc. Am.</i>	17.1	40.0	19.3	28.4
<i>Econ. Geol.</i>	23.9	17.4	18.4	20.0
<i>J. Geol.</i>	14.8	10.9	9.9	12.0

* All 1930 issues of the source journals available here on November 24, 1930, were considered, i.e., *Am. J. Sci.*, January to November; *Am. Mineral.*, Nos. 1-11; *Bull. Am. Ass. Petroleum Geol.*, Nos. 1-11; *Bull. Geol. Soc. Am.*, Nos. 1-2; *Econ. Geol.*, Nos. 1-7 and Suppl. to No. 3; *J. Geol.*, Nos. 1-7.

Finally, Table VIII presents the 1,015 foreign references (Canada again considered as domestic, as

justified above) classified according to language. Danish, Norwegian and Swedish are grouped together as Scandinavian. The great relative importance of German is apparent. French suffers, perhaps, from the scarcity of paleontological references in the sources

TABLE VIII

Language	Foreign references	
	Number	Per cent.
German	486	47.9
English	262	25.8
Scandinavian	87	8.6
French	84	8.3
All others	96	9.4
Totals	1,015	100.0

considered, but probably gains in number of titles because of the brevity of the contributions (forty in number) to the principal French periodical, *Comptes rendus*.

OBITUARY

MEMORIALS

THE significance of the work of John Bartram was commemorated by representatives of leading botanic and horticultural associations in this country and in England at the celebration of the two hundredth anniversary of the founding of Bartram's Garden, the first botanic garden in the American colonies. The observance was held at the Academy of Natural Sciences in Philadelphia on June 5 and 6, also at the Bartram Garden, overlooking the Schuylkill River, by the John Bartram Association, the American Philosophical Society, the Pennsylvania Horticultural Society and the Academy of Natural Sciences. Among the speakers were Dr. Rodney Howard True, professor of botany at the University of Pennsylvania, and Dr. John Hendley Barnhart, bibliographer of the New York Botanic Garden. An address by Dr. Witmer Stone, vice-president of the Academy of Natural Sciences of Philadelphia, was read in his absence.

The *British Medical Journal* reports that a fund is being raised to establish a permanent memorial to Dr. Hughlings Jackson. Among those who are taking action in the matter are many old friends and pupils who revered and loved Jackson, and who recognize to what an extent the preeminent position of British neurology in the medical world is due to his work and influence. He was among the great leaders of modern neurology, and it is much to be desired that the

inspiration that he gave to so many in his lifetime should be kept fresh, and still serve as a stimulus to a younger generation who knew him not. It is hoped to raise an amount sufficient to provide a permanent endowment for the Hughlings Jackson Lecture, given every third year before the section of neurology of the Royal Society of Medicine. Several generous promises of support to such a fund have already been received, but the signatories of this letter feel that an opportunity to subscribe should be given to many who can only be reached through the publicity of the press, and who would certainly wish to show their appreciation of the position which Hughlings Jackson holds in the history of modern medicine. Dr. Wilfred Harris, of 56, Wimpole Street, London, W.1, has consented to act as treasurer of the fund, and subscriptions should be sent to him, marked "Hughlings Jackson Memorial Fund."

RECENT DEATHS

DR. FRANKLIN HENRY GIDDINGS, professor emeritus of sociology at Columbia University, died on June 11. He was seventy-six years old.

DR. JOSEPH H. HATHAWAY, assistant professor of anatomy at the University of Michigan, died on June 12, at the age of fifty-two years.

MISS EMILY HOWSON, professor of astronomy at Agnes Scott College, Decatur, Illinois, died on June 6th.

THE death is announced of M. Raoul Gautier, honorary director of the Geneva Observatory.

PROFESSOR G. B. FROSTERUS, director of the Institute for Soil Science, Helsinki, died on March 1 at the age of sixty-five years. Dr. Frosterus took part in the development of soil science in Finland and was an active member of the International Society of Soil Science.

THE death at the age of ninety-two years is announced of Professor Wilhelm Franz Exner. Dr. Exner was for some time professor at the College of

Agriculture of the University of Vienna and later professor of mechanical technology and engineering.

Nature reports the death of Dr. Rudolf Marloth, who was president of the South African Association for the Advancement of Science in 1914 and author of works on the flora of South Africa, and of Dr. Alwin Berger, an authority on succulent plants and cacti, who contributed a monograph on the Crassulaceae to Engler-Prantl's "Natürliche Pflanzenfamilien."

SCIENTIFIC EVENTS

BOTANICAL RESEARCH STATIONS IN AFRICA

SIR ARTHUR HILL, director of the Royal Botanic Gardens, Kew, recently addressed the Dominions and Colonies Section of the Royal Society of Arts on the scientific research work he had seen during his recent tour in South and East Africa.

According to an abstract in the London *Times* the lecturer described the principal centers of research work that he visited and singled out the National Botanic Garden at Kirstenbosch as one of the most remarkable. Here, he said, with the unique and magnificent setting of Table Mountain and the groves of the beautiful Silver Tree (*Leucadendron argenteum*), there was being built up a garden which, with proper care and attention in the way of sufficient funds for maintenance and development, should be one of the great botanic gardens of the world. Kirstenbosch was bought by Cecil Rhodes, in 1895, as part of his far-sighted scheme for preserving the eastern slopes of Table Mountain and Devil's Peak as a National Park, and in 1913, thanks to the efforts of the late Professor Harold Pearson and Sir Lionel Phillips, a portion of the estate was set aside by government for the establishment of a National Botanic Garden.

It was very much to be hoped that no pains or money would be spared in order to carry out to the full the vision of those two benefactors to botany in South Africa, so that the garden might be fully developed; also that the slopes of the mountain might be adequately preserved both from the depredations of forest fires and from the incursions of exotic trees. Thus only could we hope to see Rhodes's vision of a great National Park on Table Mountain and Pearson's conception of a South African National Garden properly honored by memorials of supreme interest and value to the whole world.

Referring to the East African Agricultural Research Station at Amani, in the East Usambara Mountains, Tanganyika Territory, Sir Arthur said that

the question of soils was also one of great importance to all the East African Territories and a Soil Museum was being built up at Amani, which in course of time should be as useful as a herbarium with its botanical specimens. Those soil samples would be of particular value in ascertaining the physical and chemical properties of those East African soils known to be subject to serious erosion, which was so important a problem in the tropics.

THE REFORESTATION PROGRAM

FOREST planting by all agencies in the United States amounted last year to 138,970 acres, a gain of 24 per cent. over 1929, according to completed reports from 43 states and territories made public on June 6 by the Forest Service of the Department of Agriculture. Last year's planting brought the cumulative record for all lands reforested to date in the United States to 1,798,048 acres. Federal, state, municipal and private plantings all made substantial gains despite drought and adverse economic conditions.

Other than the federal and state governments, 19,161 agencies and individuals participated in forest planting last year, which set the new record for acreage reforested. Of the more than 17,000 individuals about four fifths were farmers.

Forest Service plantings in the National Forests amounted to 21,678 acres, 19 per cent. more than the year preceding. Forest Service plantings are planned on a still larger scale this year, and spring planting has been active in several National Forests.

State forestry department plantings last year amounted to 41,038 acres, a gain of 30 per cent. over 1929. Plantings by municipalities aggregated 9,214 acres, an increase of 55 per cent. Industrial organizations planted 30,230 acres, a gain of 20 per cent., and organizations of other types, with 2,518 acres planted, gained 66 per cent. Schools and colleges put out 825 acres of trees, 53 per cent. more than the