German	Price per sheet (16 pages)	English	Price per sheet (16 pages)	American	Price per sheet (16 pages)
Archiv für Dermatologie und Syphilis	$0.19	*British Journal of Dermatology and Syphilis*	$0.30	*Archives of Dermatology and Syphilology*	$0.06
Archiv für Gynäkologie	.21	*Journal of Obstetrics and Gynecology of the British Empire*	.24	*American Journal of Obstetrics and Gynecology*	.15
Brauer's Beiträge zur Klinik der Tuberkulose mit Zentralblatt für Tuberkulose	.21	*British Journal of Tuberculosis*	.18	*American Review of Tuberculosis*	.11
v. Greefe's Archiv für Ophthalmologie	.28	*British Journal of Ophthalmology*	.25	*Archives of Ophthalmology*	.15
				American Journal of Ophthalmology	.14
Pflüger's Archiv für die gesamte Physiologie	.22	*Journal of Physiology*	.27	*Journal of General Physiology*	.09
Zeitschrift für Hals-, Nasen und Ohrenheilkunde	.17	*Journal of Laryngology and Otology*	.16	*Laryngoscope*	.14
Zeitschrift für Hygiene	.19	*Journal of Hygiene*	.31	*Journal of Hygiene*	.15
Zeitschrift für Kinderheilkunde	.23	*British Journal of Children's Diseases*	.34	*Journal of Diseases of Children*	.06
Zeitschrift für die gesamte Neurologie und Psychiatrie	.30	*Journal of Neurology and Psychopathology*	.32	*Archives of Neurology and Psychiatry*	.07

CORNELL UNIVERSITY SETH WAKEMAN

QUOTATIONS

INTERNATIONAL CONGRESSES

IT will be remembered that the National Union of Scientific Workers issued in May a vigorous protest against the boycott of ex-enemy nations organized by the "International Research Council." This protest was given a fair amount of publicity in the press, though some journals, in particular *Nature* and *The Times*, declined to print it; and copies were sent to the principal scientific societies in Great Britain, and to a selection of foreign academies and societies.

A good many replies have been received. A number of these (for example, those of the Royal Society and the Royal Astronomical Society) are merely formal acknowledgments, stating that the secretary will bring the matter before the council of the society.

Some few societies, however, have already found time to consider the question. Thus the Optical Society has passed a definite resolution of sympathy with the attitude of the Union. The Meteorological Society is "not opposed" to the admission of ex-enemy nations to international Unions and Congresses. The Geological Society and the London Mathematical Society have never associated themselves with the boycott.

No society has, at present, expressed an opinion on the opposite side; and there can be no reasonable doubt that the Union's claim to represent, in this matter, "an overwhelming majority of British men of science," was perfectly justified.

A considerable number of replies have been received from German academies. These naturally all express agreement with our resolution, and gratitude to the Union for the stand it has taken. . . .

One "international" congress was held during the summer, the Mathematical Congress at Toronto. In connection with this, our protest excited a good deal of attention in America. It is an instructive comment on the manner in which the boycott has been organized, that many American mathematicians who attended the congress discovered for the first time when they arrived at it that Germans were excluded. A good deal of indignation was expressed, and the representatives of the American Mathematical Society moved a resolution for the removal of the ban. This

was supported by the delegates of Denmark, Great Britain, Holland, Italy, Norway, Sweden and Switzerland. It was then pointed out (as any reader of our protest could have foretold) that such a resolution was contrary to the statutes of the "International Research Council," under which the congress had been convened. In these circumstances no resolution could be carried, but it was agreed that the attention of the council should be called to the discussion; and the official proposal that the next congress should be held in Brussels, under the present regulations, was withdrawn.

It is safe to say that the Toronto congress was the last "boycott" congress of mathematics. It is possible that the International Research Council will themselves remove the ban when they meet next year. If they do not, the Union of Mathematics will collapse, or degenerate into a purely Franco-Belgian affair, and the way will be clear for the revival of a genuinely international congress.—Professor G. H. Hardy in *The Scientific Worker.*

SPECIAL ARTICLES

THE BRIGHTNESS OF MARINE LUMINESCENCE

IN 1922[1] the present writer published a comparison of the brightness of several luminescent substances, including that of a sample of luciferin kindly presented to him by Professor E. Newton Harvey. More recently there have been opportunities to estimate the brightness of luminescence of several marine forms.

In the former experiments[1] use was made of an optical pyrometer of the type in which an incandescent filament is superimposed upon the glowing surface, the brightness of which is to be measured. This instrument was calibrated to read in millilamberts instead of degrees of temperature.

When it comes to the measurement of the light given out by marine forms in the open sea it is almost impossible to use the pyrometer because of the difficulty of bringing these fleeting patches of light into the field of the instrument. It was found possible however by looking at the image of the filament with the right eye, while the left eye was free to observe whatever gleams of light came into the field of unobstructed vision from the water toward which the observer was looking, to adjust the filament to equality of brightness with the luminescence thus observed. Readings made in this manner do not possess quite the degree of certainty of observations made in the usual way upon a fixed and steady source of light, but it was found that they were rather surprisingly consistent and satisfactory and really afforded a quite reliable estimate of the brightness of the luminescence which was to be measured.

Calibration of the instrument when thus used with two eyes is readily made by setting the filament to match the brightness of any convenient surface alternately by the binocular and the monocular method.

The following is a summary of the studies made by the method above described.

1. At Sanibel Island, Florida: Although this locality is noted for its marine "phosphorescence," the accounts of brilliant displays given by Rowland Ward[2] being abundantly confirmed by those who are acquainted with the surrounding waters, only the most meager exhibits were in evidence either in the passes of the Caloosahatchie River or along the shore of Sanibel Island during the fortnight in April (1924) when the writer was present. Occasional star-like sparkles and the diffuse luminescence of breaking waves were observable, however, from a fishing stage on the gulf shore of the island. These, which were presumably due to dino-flagellates, were measured.

2. From Shipboard off the Carolina Coast: During a trip from Jacksonville to Baltimore a few days later measurements were made of the luminescence of the bow-wave of the steamer and of the glow observable in the wake. In this case as at Sanibel Island the nights were without moon and partly cloudy.

3. At Woods Hole: In August of the present year, also during the dark of the moon, measurements were made from the float of the Marine Laboratory. To the members of the laboratory for this privilege and in particular to Professor Harvey, who identified the luminescent organisms, the writer wishes to express his indebtedness.

LIST OF OBSERVATIONS

Locality	Source	Brightness in millilamberts
Shipboard	A diffuse glow in the wake	.0007
"	Diffuse glow of bow wave	.0063
Sanibel Island	Diffuse glow of breaking waves	.0063
" "	Individual flashes of dino-flagellates	.116
Woods Hole	Individual flashes of dino-flagellates	.116
" "	Colonies of hydroids	.033
" "	Mnemiopsis Leidyi	.11 to .30

It is interesting to note that the diffuse glow of breaking waves, as observed at Sanibel and on shipboard, were of the same order of brightness and that

[1] Nichols: SCIENCE, lv, p. 157 (1922).

[2] Ward: "The English Angler in Florida," London, 1898.