QUOTATIONS

INSULIN AS A CURE FOR DIABETES

ON another page we print an important communication from the Medical Research Council relating to a promising remedy for diabetes recently discovered at Toronto. Diabetes is one of the more serious afflictions of mankind, insidious in its beginnings, debilitating in its course, and often fatal. At present the treatment is little more than an effort to prolong life by a regimen of habit and diet so arduous as to make it very irksome. Dr. F. B. Banting, a young physician attached to the University of Toronto, acting on the known fact that extirpation of the pancreas in dogs is followed by a diabetic condition, thought it possible that the secretion discharged into the blood by that gland might be the factor inhibiting the onset of the disease, and that its administration in some form might prove a remedy. Experimental work confirmed his theory, which has, in fact, been thought probable for many years. A substance, to which the name "insulin" has been given, extracted from the pancreas of the ox, pig or sheep, when injected into the veins of human diabetic patients has frequently given quick relief, and has appeared to lead towards cure. But the remedy is still in an early stage. The exact constitution of insulin, as, indeed, of many other of the subtler animal essences, is still unknown; its preparation demands high skill and special methods; its administration must be watched by expert physicians. In the opinion of the medical faculty of the University of Toronto, of their American colleagues and of representatives of our own Medical Research Council, any premature exploitation of insulin might gravely disappoint the public, and even prevent the ripening of the hopes of these high authorities. It has therefore been decided to protect and control its manufacture and use in the United States and in Canada. Similar protection and control in this country have been offered to and accepted by the Medical Research Council. To protect the public and to perfect a great boon are objects which command respect. But while recognizing that special circumstances may in this case justify it, we are not entirely reassured about the method—a feeling that seems to have given an apologetic tone to the communication issued by the Medical Research Council. For it is proposed to patent the remedy—a course excluded from the practice of the Pasteur Institute. Pasteur and Metchnikov determined that their discoveries should be offered as a free gift to the world, although the possibilities of fraudulent or foolish exploitation by others, of mistaken use, and even of employing the revenue from patents for further research were present to their minds.—*The London Times.*

JUSTICE FOR THE PUEBLO INDIANS

IN formally protesting against the passage of the Bursum Pueblo Indian Bill the American Ethnological Society took account only of the plain facts. It is a thoroughly vicious measure, designed to put a premium on fraud and to commit the United States government to a sweeping raid on the lands and water rights of the New Mexico Indians. The council of the Peabody Museum of American Archeology and Ethnology of Harvard uses very moderate language when it calls public attention to "the iniquity and hardship" of the bill to the end that it be defeated.

The Bursum bill was put through the Senate on the strength of misleading statements. The scheme could not be worked again. Full publicity would prevent it. For a little publicity has already rallied to the support of the cause of the Pueblo Indians disinterested persons and organizations that will not desert them or be lulled to sleep as the Senate was.

These Indians, living peacefully in some twenty tribal groups, have been steadily crowded off lands confirmed to them by the United States government by outsiders having no valid titles. The government is bound to protect them as its wards, but it has failed to do so.

But as it turns out, the Pueblo Indians, though voteless, are not friendless. It is a wholesome sign that before they had united in voicing their own protest against the Bursum bill, friends from many quarters had volunteered assistance and accepted the burden of the fight in their behalf. Congress and the administration can not afford to be indifferent

to the flood of protest pouring in on them against this betrayal of the Pueblo Indians for the sake of a few New Mexico land-grabbers.—*The New York World.*

SPECIAL ARTICLES

SERIES REGULARITIES IN THE ARC SPECTRUM OF CHROMIUM

THE detection of two sets of related triplets, by Meggers and Kiess, in the course of their work on the arc spectrum of chromium, induced the present writers to undertake a more thorough examination of the spectrum, to find, if possible, other regularities which might lead to series relationships. While a detailed discussion of the work has not yet been completed, enough has been found to warrant the following statements.

At least three sets of series whose members are triplets, occur in the arc spectrum of chromium. Of these, two sets are composed of wide triplets, and one set of narrow triplets. The wide-triplet series are parallel; that is, there exists a constant difference between the wave numbers of homologous members. Each component of the first member of the diffuse series is itself a narrow triplet. In the table are given data for the first members of the principal, sharp and diffuse series of the two parallel systems:

λ I. A. (Vacuum)	ν	Δν	λ I. A. (Vacuum)	ν	Δν	Separation
p			*p*			
4255.53	23498.84	112.44	3579.69	27935.38	115.10	4436.54
4275.99	23386.40		3594.50	27820.28		4433.88
4290.92	23305.02	81.38	3606.35	27728.86	91.42	4423.84
s			*s*			
7464.39	13396.94	112.45	11160.2	8960.4	115.2	4436.5
7402.26	13509.39		11018.6	9075.6		4433.8
7357.95	13590.74	81.35	10908.8	9166.9	91.3	4423.8
d			*d*			
5331.18	18757.57		6982.79	14320.92		4436.65
5330.58	18759.68		6981.75	14323.06		4436.62
5329.80	18762.43	112.78	6980.23	14326.18	115.16	4436.25
.....	.....		6927.90	14434.39		.....
5299.32	18870.35		6927.09	14436.08		4434.27
5298.81	18872.16		6925.96	14438.43		4433.73
5277.56	18948.15	81.29	6885.00	14524.33	91.54	4423.82
5277.09	18949.84		6884.23	14525.96		4423.88
5276.59	18951.64		6883.40	14527.62		4424.02

The narrow triplets which constitute the third set of series are characterized by the frequency differences $\Delta\nu_1 = 8.80$ and $\Delta\nu_2 = 5.65$. Several doublets in which each of these separations exists and also one with the separation, $\Delta\nu = 81.37$, have likewise been found. These are suggestive of inter-series combinations.

C. C. KIESS
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WASHINGTON, D. C.,
OCTOBER 10, 1922

THE NATIONAL ACADEMY OF SCIENCES

THE autumn meeting was held in New York City on November 14, 15 and 16, on successive days at Columbia University, the Rockefeller Institute for Medical Research and the United Engineering Societies Building. The scientific program was as follows:

Biographical memoir of Harmon Northrup Morse. (By title) IRA REMSEN.

A catalogue of bright stars, a compilation of all the known data concerning the 9110 brightest stars: FRANK SCHLESINGER. The requirements for an abstract are perhaps sufficiently complied with by the title itself, but it may be well to say in addition that the catalogue gives the name of each star, its position for 1900, the Durchmusterung number, magnitude, spectrum, proper mo-