then repeatedly with 85% alcohol, at the boiling points, and the extracts filtered from the coagulum on a hot-water funnel. The filtrates were cooled to from 0° C. to — 5° C., the precipitate was filtered out and purified by boiling with absolute alcohol, diluting the filtrate with water to make 85% alcohol, chilling, filtering, treating the precipitate repeatedly with cold ether to remove cholesterin, dissolving in hot chloroform, reprecipitating by chilling, filtering and expressing all possible traces of chloroform. The resulting product is a white, somewhat crystalline substance, freely soluble in warm 85% alcohol or chloroform, but reprecipitating upon cooling. It contains fatty acids, phosphorus, methyl, sulfur, and, upon cleavage with dilute sulfuric or hydrochloric acid, yields a reducing substance from which an osazone may be prepared.

For purposes of comparison, a similar substance was prepared from beef brains, with the same method. Analyses of these products, two from different lots of beef kidneys and one from beef brains, were kindly made for the author by Dr. Phœbus A. Levene, with the following percentage results:

	From Beef Kidney.		From Beef Brain.	Cramer's Figures for Protagon from Beef Brain.
	(1)	(2)		
C	65.61	65.55	65.76	66.25–66.42
H	11.00	11.09	10.66	10.82–11.07
N	3.17–3.15	3.24–3.26	2.51	2.29
P	2.06	2.19	0.97	1.04
S	0.82		1.33	0.71

The substance from the kidney contains distinctly more nitrogen and phosphorus than that from the brain, and that obtained by the author from the brain contained considerably more sulfur than that prepared from the same source by Cramer. The cleavage products, however, show that all of these substances belong in the same group. The nature of the glucosid which may be obtained from these substances can only be determined by using larger quantities than have as yet been obtained, and the author hopes to report results in this direction in the near future.

30 (76). **"Comparative physiological action of salts of neodymium, præseodymium and lanthanum": B. J. DRYFUSS** and **C. G. L. WOLF.**

The experiments were undertaken to investigate the compara-

tive physiological action of three elements, which are of equal valency and of approximately the same molecular weight, and whose chemical properties are closely related. The experiments were carried out *in vitro* and on unicellular organisms, bacteria and infusoria, frogs, pigeons, rats and guinea-pigs. The solutions used were the chlorids, isotonic with 0.6% sodium chlorid. In one case the propionate was used without any marked difference in the result being observed.

The chlorids coagulate egg and serum albumins, but neither the purified albumoses from Witte's peptone nor peptone are precipitated.

Dilute solutions delay the growth of bacteria and eventually kill. The solutions are not very toxic to spores. Opalina, paramecia, and vorticellæ are killed quickly, equivalent solutions of the chlorids acting in the following order of strength: Neodymium, præseodymium and lanthanum.

In frogs voluntary and involuntary muscle are quickly put out of action. This is particularly the case with perfused muscle. The solutions act in the same order as with unicellular organisms. Intravenous injection causes almost instant death, due to multiple embolism.

Attempted chronic poisoning was unsatisfactory. The solutions were introduced both subcutaneously and intraperitoneally. Some of the animals died with ill-defined symptoms. Others remained well, except for areas of induration at the seat of injection. Experiments with oral administration and on elimination will be conducted.

As all the solutions, owing to hydrolysis, are acid in reaction, the authors are inclined to attribute a large share of the acute effects to the acid present. The salts range themselves in their toxicity according to their molecular weights.

31 (77). **"The influence of bile upon blood-pressure": S. J. MELTZER** and **WILLIAM SALANT.**

There have not been very many studies regarding the influence of bile upon blood-pressure, and among these the statements are conflicting. Thus, Traube, who was the first to study it upon the kymograph, states that the intravenous injection of bile salts causes