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PHOSPHORUS AS A THERAPEUTIC AGENT

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PHOSPHORUS therapy dates from about the middle of last century, following the discovery that phosphorus was a constituent of normal blood. Churchill of Paris¹, in a paper published in 1858, enunciated the theory that tuberculosis was due to a deficiency of phosphorus in the blood. The drug produced its beneficial results because it was a hematinic. He claimed the production of new blood was so great that the patients suffered from hæmorrhages from the nose and from hæmorrhoids. Some of his patients grew heavy beards in an incredibly short time, others cut wisdom teeth with astonishing rapidity. The bed-ridden rose and walked.

The hypophosphite was chosen because phosphorus was too irritating and secondly because it was the form of phosphorus which was readily oxidized. "The tuberculous diathesis depends on a diminution in the element phosphorus and that this element, having to play the rôle of a combustible body, must be administered in a less completely oxidized form than that of phosphoric acid."² The inorganic salts became popular, especially the preparation known as Parrish's Chemical Food (Syr. Ferri Phosph. Co.). Later the medical profession had to pass through the era of organic preparations. The glycerophosphates were introduced in medicine by Robin³ in 1894, and were recommended for malnutrition. Their use became so popular that they are now included in nearly every foreign pharmacopea. Among the more recent additions to the list of organic preparations are phospholecithin, sanatogen and Wincarnis, the last a preparation of glycerophosphates in red wine. Wincarnis is recommended (to quote from the literature sent out by the manufacturer) "as a general tonic and is indicated for what is vulgarly termed general debility, also for the weak, anæmic, nervous or emaciated; of special value in anæmia, chlorosis, neur-

¹Read before the Harvey Club, London, Canada, January 13th, 1920.

²From the Department of Pharmacology, Western University Medical School.