

digestion, the assimilation, the appetite, the weight, and the powers of resistance of the sufferer to normal, in the quickest possible time. Fortunately, nature has provided two chemical elements, iron and manganese, which are as necessary to the system as life itself, and which, when given in the proper amounts and in the proper forms, will carry the patient through convalescence to health. In the delicate state of the digestion of a convalescent it is of the utmost importance that the forms of iron and manganese administered be such as to become absorbed and assimilated with the least disturbance of the gastrointestinal organs. The old-fashioned inorganic preparations of iron which still figure in the Pharmacopœias of various countries are totally unsuited for this purpose. The scientific researches of Hamburger, Bunge, and others, conducted during the past twenty-five years, have shown the immeasurable superiority of the organic compounds of iron and manganese. The organic compounds alone have been found to be absorbable in such amounts as to produce the desired action on the blood. Of these compounds, the peptonate, which is an organic-chemical combination of iron and manganese with peptone in solution, known as Pepto-Mangan (Gude) is the most readily absorbed, and therefore the most efficient preparation of iron-manganese known, and as such is used with the greatest benefit in convalescent anemias. A point which is frequently lost sight of in considering the treatment of anemia, is the importance of manganese as a constituent of normal blood, and as an element ranking only next to iron in its power of building blood corpuscles and increasing the life-bearing hemoglobin of these cells. Campani, an Italian savant, as early as 1872, demonstrated that manganese is found in the red blood cells, as well as in the serum of normal blood, and the more recent researches of Lecanu and Lhéritier show that manganese forms a constant constituent of the hemoglobin molecule. Furthermore, Zaleski (*Zeitschr. f. physiol. Chemie*, 1904, p. 449) showed that manganese enters the molecule of hemoglobin with the same readiness as does iron, and therefore it has the same blood-forming power as iron. But perhaps the most important fact in connection with manganese