

and, as it deals with the general disturbance of nutrition under the various organs, it has a considerable practical value. The fourth chapter on the general treatment by diet is a very important one. It includes a section by Professor v. LEYDEN on the indications for dietetic treatment, one by Professor Klemperer on food stuffs and artificial preparations, one by Professor Liebreich on medicinal agents of service in supplementing dietetic treatment, and one by Professor Senator on baths and climatic and exercise treatments.

In dealing with the indications for dietetic treatment Professor v. Leyden begins with a consideration of the diet in health, and finally concludes with remarks on a quantitative diet. Amongst other matters the author discusses the medicinal action of food stuffs, and he is of opinion that beyond the thyroid treatment, and perhaps that by testicular extract, very little is really definitely known of the great number of tissue extracts more or less recently introduced under the general title of organotherapy.

In Professor Liebreich's article the remedies of service in various unhealthy states of the alimentary tract are chiefly considered. The remaining part of the first volume will contain an account of the technique of feeding as well as artificial feeding and the various so-called dietetic cures. The second volume will deal with the special dietetic treatment of disease under the various systems and organs.

The subject of nutrition and feeding is undoubtedly one of the most difficult chapters in normal and pathological physiology, and yet it is one in which considerable advance has been made in recent years. The present work has been rendered possible and even necessary by this increased knowledge.

**THE SPAN OF GESTATION AND THE CAUSE OF BIRTH: a Study of the Critical Period and its Effects in Mammalia.** By JOHN BEARD, D.Sc., University Lecturer in Comparative Embryology and in Vertebrate Morphology, Edinburgh. Jena: Gustav Fischer. 1897. (Roy. 8vo., pp. 132. 3s.)

THIS book is an attempt to elucidate the cause or causes which govern the time at which offspring are born into the world. The author thinks the key to the enigma is to be found in what he terms the "critical period." The critical period is the time when "the embryo has acquired its equipment; when its parts, though not yet fully elaborated, are all in existence" (p. 19). This critical period is marked by the commencing degeneration of those structures which have no place in the fully-developed organism. All non-placental mammals are born at the critical period. Only the evolution of an allantoic placenta can carry the birth over till a later period. The allantoic placenta commences to develop some little time before the critical period is reached, but it first enters upon its functions at or during the critical period. The period of time from fertilisation to the critical period the author terms the "critical unit." There is a correspondence between the length of the development *in utero* and ovulation (p. 34). The length of the critical unit is in man 46 to 47 days, about twice that of the "ovulation unit," which the author puts at "23½ days, or perhaps more, though hardly 24 days" (p. 76). The gestation period in man amounts to six critical units. In different mammals the multiple of the critical unit varies, but the length of pregnancy is always a multiple of the critical unit.

The author's views are supported by arguments and observations the collection of which must have involved much labour, and his thesis certainly displays ingenuity. Whether he has solved the question or whether he has merely restated the problem in a different form of words, we must leave our readers to judge for themselves. It is to be hoped that those interested in the subject will read the book before forming a judgment.

**HISPANO-PORTUGUESE SURGICAL CONGRESS.**—It has been decided to hold a Hispano-Portuguese Surgical Congress every year. The first meeting will be held at Madrid in April, 1898, immediately before or after the International Congress of Hygiene and Demography. The President of the Organising Committee is Dr. José Calvel y Martin, the Vice-President Dr. Rafael Cervera.

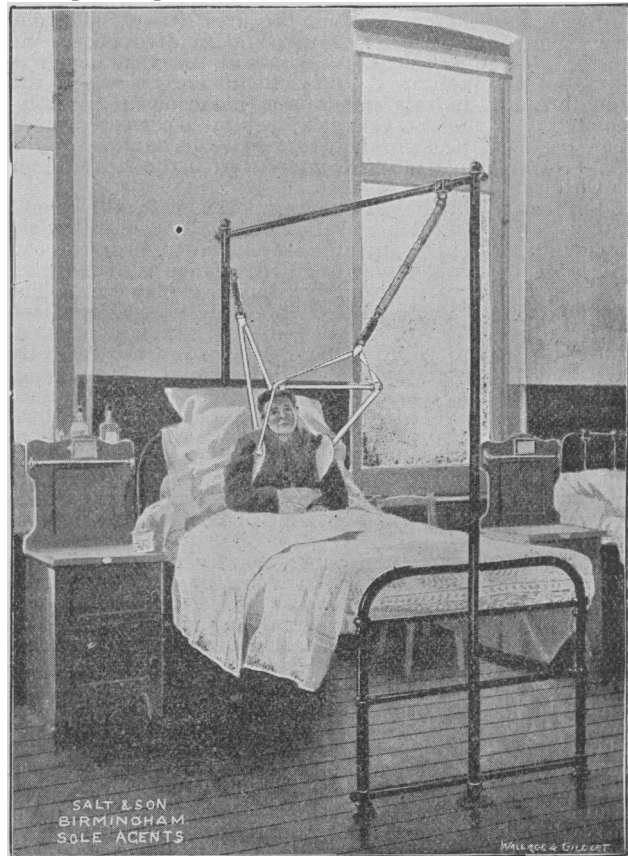
## REPORTS AND ANALYSES

AND

### DESCRIPTIONS OF NEW INVENTIONS

#### A CHEST EXPANDER.

DR. ROBERT M. SIMON, F.R.C.P. (Physician to the General Hospital, Birmingham) desires to bring before the notice of the profession an appliance for patients suffering from asthma, bronchitis, and heart weakness. He writes: I have made a careful trial in my own practice with highly satisfactory results. The ordinary bed rests made to support patients suffering from asthma, heart disease, angina pectoris, so fail inasmuch as they do not relieve the chest from the superincumbent weight of the shoulders, neck, and head, and the enfeebled muscles are thus handicapped in the effort of breathing. The appliance in question, of which the illustration gives a good idea, supports the weight of the upper



extremities; at the same time it in no way compresses the walls of the chest. The bands of suspension are attached to carefully-adjusted springs in such a manner as to give the greatest degree of elasticity and freedom of movement, while at the same time maintaining the support. The apparatus takes up but little room in the bed, and the patient can raise or lower himself to any desired level by means of the side-adjustment, without disturbing the pillows.

Particulars as to attachment are supplied by the makers, the Asthma Suspender Company, who have appointed Messrs. Salt and Sons, of 69, Corporation Street, Birmingham, surgical instrument makers, as their agents. The appliance, which was the invention of a patient suffering from asthma, would appear likely to be of use in any case, either medical or surgical, in which it is required to relieve the trunk from the weight of the head, shoulders, and arms.

I have found this appliance especially useful in asthma; by its use the attacks are diminished in severity and lessened in frequency.