## Rickets in Art—Continued

prevailed in those days. It would be natural to look for evidence of this disease among the people who lived in Cologne and Nuremberg and Bruges between 1450 and 1500, or from a century and a half to two centuries before Glisson described the disease in England.

"Fortunately, the painters of that period made many pictures of religious scenes in which children were used as models, and one can call on that inspired school of painting which flourished so wonderfully in the unsettled years after the middle of the fifteenth century for clinical material.

"Correspondingly, in the pictures of the second half of the sixteenth century one sees a great many well nourished children and fewer rachitic children, despite the fact that rickets appeared in England a century later. One subject favorable for the purposes of this study was also a favorite with primitive religious painters—'The Adoration of the Child,' in which the Infant Saviour was shown lying on the floor entirely naked.

'Among the fifteenth century painters of the Netherlands and Germany whose works I have examined, the following show clinical rickets in the infant: 1447, Stephen Lochner, 'Virgin in the Grove of Roses,' in the Cologne-Richartz Muzeum; in 1460, Master of the 'Life of Mary,' 'Adoration of the Child,' Cologne-Richartz Muzeum; 1470, Swabian Master (of Augsburg) 'Adoration of the Child,' in Augsburg Church of St. Moritz, also 'The Nativity' and the 'Adoration of the Magi' in the Maximilian Museum. A number of other of his pictures show the children with the stigmata of rickets. In 1485, Bernhard Striger of Nuremberg, 'The Holy Family,' in the Germanic Museum, Nuremberg; 1490, Michael Pacher of Nuremberg, 'Birth of Pacher of Nuremberg, 'Birth of Christ,' St. Wolfgang Church; 1479, Michael Wohlgemut of Nuremberg, 'Birth of Christ'; Zwicau, Marien Kirche; 1500, Albrecht Durer, Nuremberg, 'Madonna with the Siskin.' In this painting the infant holds a flour-ball in his hand. Hans Bergmaier, sixteenth century painter, also depicted rickets.

"Among the Netherlands painters are Bruges Master, 1440, 'Adoration of the Magi,' Bruges Museum; 1440, Rogier Van Der Weyden, Brussels, 'St. Luke Painting the Madonna,' Alte Pinekotheck, Munich; 1490, Dirk Bouts, Harlem, 'Virgin and Child,' National Gallery, London."

Child,' National Gallery, London."

"If one accepts the now well proved hypothesis," Dr. Foote con-



THIS YOUNG AMERICAN'S bulging forehead and protuberant tummy are symptoms of rickets

tinued, "that rickets is a disease of mineral metabolism caused by a lack of certain substances in the diet or by a lack of sufficient sunshine, especially in industrial cities in northern countries, and that war, famine and disease predispose populations to its ravages, one is postulating conditions some of which have occurred over and over again throughout the world, among both civilized and uncivilized peoples in various periods of history.

"When one considers the conditions enumerated in connection with the historical proof of their prevalence in past times, ones sees no reason why rickets should not have existed before 1650, and one may be certain that it did so exist and has existed, perhaps from the beginning of time."

The Washington specialist believes that in all probability babies in the tribes of northern Indians suffered from the disease just as their small fellow contempararies on the other side of the globe did; but mound burial, such as was customary among Indians of the north, is not kind to cartilaginous bone and evidence is not abundant.

The bones by which doctors make a diagnosis of the ills of past ages that have survived the ravages of time are mostly the more completely ossified skeletons of adults. The softer bones of infants and young children disintegrate too readily to have come down to us in great numbers.

There is, however, in the U. S. Army Medical Museum, a skull of an Inca Child of about five years who lived in the temperate highlands of Peru at least a hundred years before Columbus came to this continent. This relic shows (Turn to page 165)

## Contra Astrologos

Philosophy

St. Augustine, in Confessions (Pilkington translation) (Boni and Liveright):

These impostors, then, whom they designate Mathematicians [Astrologers], I consulted without hesitation, because they used no sacrifices, and invoked the aid of no spirit for their divinations, which art Christian and true piety fitly rejects and condemns. . . . There was in those days a wise man, very skilful in medicine, and much renowned therein. . . . When I had become more familiar with him, and hung assiduously and fixedly on his conversation (for though couched in simple language, it was replete with vivacity, life and earnestness), when he had perceived from my discourse that I was given to books of the horoscope-casters, he, in a kind and fatherly manner, advised me to throw them away, and not vainly bestow the care and labour necessary for useful things upon these vanities; saying that he himself in his earlier years had studied that art with a view to gaining his living by following it as a profession, and that, as he had understood Hippocrates, he would soon have understood this, and vet he had given it up, and followed medicine, for no other reason than that he discovered it to be utterly false, and he, being a man of character, would not gain his living by beguiling peo-"But thou," said he, "who hast ple. rhetoric to support thyself by, so that thou followest this of free will, not of necessity-all the more, then, oughtest thou to give me credit herein, who labored to attain it so perfectly, as I wished to gain my living by it alone." When I asked him to account for so many true things being foretold by it, he answered me (as he could) "that the force of chance, diffused throughout the whole order of nature, brought this about. For if when a man by accident opens the leaves of some poet, who sang and intended something far different, a verse oftentimes fell out wondrously apposite to the present business, it were not to be wondered at," he continued, "if out of the soul of man, by some higher instinct, not knowing what goes on within itself, an answer should be given by chance, not art, which should coincide with the business and actions of the question."

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Death rates from heart disease, pneumonia, cancer, tuberculosis, and diabetes were all higher in 1926 than in 1925, government figures show.