

Human Monstrosities.

The Mystery and Lore of Monsters: with Accounts of some Giants, Dwarfs and Prodigies. By C. J. S. Thompson. Pp. iv + 256 + 32 plates. (London: Williams and Norgate, Ltd., 1930.) 15s. net.

MR. C. J. S. THOMPSON, who is known to medical men because of contributions made to the history of their art, has published, in book-form, gleanings he has gathered concerning the ancient lore of human monsters. His book will make a wide appeal, not only to those who are interested in the 'lore of monsters', but also to embryologists who are in search of the rarer aberrations undergone by the human body in the course of development. His text is clear and easy, and is enriched by many illustrations of 'prodigious births' which have adorned the records published by writers in former centuries.

Down to the end of the seventeenth century, it is difficult to know whether the abnormalities which are described had actually been seen by authors or only imagined. Lycosthenes, who wrote "*Prodigiorum ac Ostentorum Chronicon*" in 1557, illustrated by 1500 woodcuts, gives the following account of the 'terrible child' who was "born in Craconia of noble parents. It had bright fiery eyes, the mouth and nostrils like an ox's. It had long horns and a black fur like a dog's and on its breasts, faces like apes. It was splay-footed, and splay-handed. The feet were like swan's feet and it had a tail twined upwards, that was crooked backwards about half-an-ell long. It was born and lived four hours and then spoke thus, '*Watch, the Lord our God comes*'."

The ancient Babylonians, Egyptians, and Greeks believed any combination of human and animal parts was possible; indeed, the study of ancient records is a study of human credulity rather than of embryological aberration. We are not surprised, however, that George Buchanan, the Scottish historian, who did so much to strip myth from truth in the records of his own country, should write rationally and with interest of monsters. "About this time (1490)," he says, "a strange kind of monster was born in Scotland. In the lower part of the body it resembled a male child, differing nothing from the ordinary shape of the human body, but the trunk and all other members became double and were distinct both in their use and appearance. The King caused it to be carefully brought up and educated, particularly in music, in which it wonderfully excelled. It learned different languages, and in their various inclinations the two

bodies appeared to disagree between themselves, sometimes disputing, each preferring different objects and sometimes consulting for the common pleasure of both."

Mr. Thompson cites examples which taxed the learning of clergymen as well as of surgeons. The clergymen had to determine whether the monster was to be regarded as being made up of two souls or of only one, and whether, in baptising, two names had to be given or if one would suffice. The surgeon's perplexities were of a less metaphysical nature: Was the bond which joined two bodies of a kind which could be severed? If one part of the monster died, could the living part be saved? Modern surgery is now attacking these problems—often successfully.

In the eighteenth century, the study of monsters entered its scientific stage; schemes of classification, based on a knowledge of normal development, were devised; only in the present century did we enter the further stage of learning how monsters could be produced experimentally. Mr. Thompson has brought a wide and accurate knowledge to bear on "*The Mystery and Lore of Monsters*".

Biochemistry in America.

The Development of Physiological Chemistry in the United States. By Prof. Russell H. Chittenden. (American Chemical Society Monograph Series, No. 54.) Pp. 427. (New York: The Chemical Catalog Co., Inc., 1930.) 6.00 dollars.

THIS is a review of the evolution of physiological chemistry in the United States during the past fifty years. Prof. Chittenden has seen it all happen, from the starting of the first laboratory of physiological chemistry in Yale in 1874 until the present day, when practically every university in the country has a staff of competent investigators and well-equipped laboratories, besides the agricultural experiment stations and laboratories of the Government bureaux at Washington, which are the admiration of the scientific world.

At the beginning, it was necessary for American and British students to go to Germany for training—Chittenden went to Kühne in Heidelberg in 1878. A start had been made in Germany in the study of natural products, although the golden age did not commence for another decade, when Kossel and Emil Fischer in particular introduced more precise chemical accuracy into the field; the reproach that "*Thierchemie ist Schmierchemie*" had been too true.

The author traces the development of laboratories, equipment, societies, and journals, and then