nitrogenous matters. Of both kinds of food the animal system has need. In the body there exists a certain relation between heat produced and muscular work. By exercise this relation becomes more favorable for muscular work. A liberal supply of albuminous matter tells favorably in the same. The reason of this is probably to be found in the better nourished and firmer condition of the muscles and of the whole body, which is obtained by means of a more highly albuminous diet. The development of man in general appears to attain the highest pitch under the use of a mixed diet."

This slight notice of and few extracts from Professor Donders's paper will lead, we hope, many of our readers to peruse and study it; it will amply repay them. As an example of careful physiological research, we do not know of any other which has recently been brought forward more deserving of attention.

ART. VII.—1. *Physiology at the Farm, in Aid of Rearing and Feeding the Live Stock.* By WILLIAM SALTER, M.D., F.R.S.E., and HENRY STEPHENS, F.R.S.E., &c. *Edinburgh and London*, 1867. Pp. 634.

2. *On Non-nitrogenised Food in a Physiological Point of View.* By the same Authors. 1867. Pp. 26.

OF 'Physiology at the Farm,' judging from those portions of it which we have read, we have formed a very favourable opinion: as a compilation from the best and most recent sources of information, it appears to us well adapted to answer the purpose for which it is designed, viz. to afford that amount and kind of physiological knowledge to the farmer which may enable him to conduct his business on scientific principles, especially the rearing and feeding of live stock.

The value of the volume is enhanced by an ample index, a full glossary, and a list of the works consulted.

Of the pamphlet, the title of which is given above, we have merely to remark that it seems to us a successful reply to certain objections which have been critically made, especially by an anonymous writer in 'The Field,' to Messrs. Salter and Stephens's views of the parts performed in the economy by nitrogenised and non-nitrogenised food.

ART. VIII.—*On the Function of the Blood in Muscular Work.*
By C. W. HEATON, F.C.S., &c.¹

THIS is an ingenious paper in support of the opinion of Mayer that all oxidation takes place in the blood; that therefore all, or nearly all, the force of the body is generated in the blood; that muscle, quoting Mayer's words, "produces

¹ From the 'Philosophical Magazine' for May, 1867.