has actively divided into two men because he has been cut in two by the passage of a railway train over his body.

Mr. Ross, at the end of his last letter to you (March 16th,

p. 646), provides an excellent example of his method of thought and reasoning. Loeb, he says, states that agencies which cause cytolysis also cause eggs to develop. This is true with certain considerable limitations which I need not notice here. Mr. Ross claims this as evidence that he is right in believing that his "auxetics" induce mitotic divisions in cells generally, because: "It is with the substances produced by cytolysis that we have for some years past been producing cell division." Mr. Ross therefore thinks, because some agencies bring about cytolysis, that cytolysis must produce these agencies. In other words, that the effect must produce the cause, because the cause produces the effect; an attitude, I may perhaps point out to Mr. Ross, quite different from the belief that an effect involves the pre-existence of a cause. It would be just as reasonable to believe that because a sufficient flame from a Bunsen burner will heat a vessel of water to boilingpoint, a vessel of boiling water will produce a Bunsen 

## THE NATURE AND ORIGIN OF CANCER.

SIR,—I do not see what useful purpose can be served by continuing further discussion with Dr. Brock concerning the material or non-material nature of the cell governor whose existence we both acknowledge. He is perfectly entitled to his own opinion that it is something like the will—such a very abstract something that it makes one giddy to think of it. I prefer the clearer atmosphere of materialism.

Dr. Brock quotes the chick as an instance of the impossibility of a material governing secretion affecting its development. I presume he acknowledges that when breakfasting on an egg he is not eating a chicken, but a store of nutriment that was never intended for him, and is a cast off portion of a feather covered mass of proto-plasm—to wit, a hen; being such, it will contain a due proportion of the governing secretion present in the maternal protoplasm. A psychologist will perhaps assert that a hen loses a little of its abstract cell governor, its will power, every time it lays an egg, until ultimately its will power is minus. Does this explain the hysterical excitement of the feathery biped after laying?

Dr. Brock seems to be able to explain what life is; he attempts to grapple with the very nature of life. Personally I am content to deal with the bodily machinery and its defects, and not to tamper with the "actuating force "-that breath of life which is given to all of us, and which in course of time departs, we know not whither.

-I am, etc., Wigan.

J. THOMSON SHIRLAW.

## THE PHYSICIAN AND PATHOLOGIST ON HEART FAILURE. SIR,—This is a day of letter writing, and so special is

knowledge becoming that unless letters are written the special worker must feel in danger of being submergedalways an unpleasant experience. I have read Sir Clifford Allbutt's most interesting address, and have studied it, as I have all his writings, with profit. I have also perused some interesting letters in your columns, and it is, I think Dr. Thomas Lewis's which has stimulated me to ask for a little of your valuable space. He pleads for breathing space and consideration to be given to what he calls the new school of cardiac research, and with which we must all and do all honourably associate his name. This plea recalls to mind a brief conversation with him-which no doubt he has forgotten-in which I humbly asked if a new and valuable journal of which he is editor was open to any other branch of cardiac research but that of the new school. His answer was brief and to the point and somewhat to this effect: Certainly, but it is the only work that is being done. Now comes my lament. I looked upon myself, with Dr. Paine, as the leader of a school which has presented to the country facts upon experimental heart disease which seemed to me, in my modesty, as only second in importance to those of the illustrious Harvey. We have demonstrated simple and malignant endocarditis and their relation to one another, myocarditis, and pericarditis, all

of rheumatic origin-itself the great cause of heart We have proved the occurrence of rheumatic dilatation and the focal nature of these lesions, and have placed in the national Hunterian Museum-epoch-making, I believe, is the correct expression—examples of these results. Yet where is our school? What mention of it in Sir Clifford Allbutt's brilliant address? What anguish rent me at Dr. Lewis's laconic reply when I realized that the school which I thought marked a new era in heart disease in this country was dead and supplanted ere my hair was white! Dr. Lewis may thus take heart, for he is not alone in trouble, and perhaps we may both agree that there is no new school in medical research upon heart disease, but only new developments initiated by the labours of those before us. Such, in my opinion, are better not looked upon as new schools, for such a view tends to depreciate collateral inquirers who are not of the same line of thought.

Sir Clifford Allbutt's address deals with problems of extraordinary complexity which no mechanical methods of investigation would seem able to solve for us; but that they will lead us nearer, as will, in my opinion, the experimental investigation of cardiac infections also, there can be little doubt—with this important proviso, that side by side must continue clinical investigation, which derives perpetually new life from these new sources, and is not, as some superficial minds would teach us, dead as regards

progress.—I am, etc., London, W., March 29th.

F. J. POYNTON.

SIR,—In Sir T. Clifford Allbutt's address I fail to see mention made of the effect of food in the stomach as one of the immediate causes of heart failure "in one who scarcely having known illness expires under no extraordinary effort; or in the peace of his own bed or elbow chair passes silently away." The article recalled to my mind the case of a hard-working agriculturist, aged 65 years, who had never had an illness of any moment, whom I was called in to see for swelling of the legs, breathlessness on exertion, cyanosis, and other signs of a failing heart. He was a very difficult case to manage, but by means of rest, diet, etc., he seemed about to enter upon a new lease of life. However, one morning he was given an extra quantity of meal porridge for his breakfast whilst sitting up in bed, previous to getting up for a few hours as usual. His nurse left him for a short time, and on her return found the patient sitting as she had left him but quite dead, with the basin in his hands and almost all the porridge eaten. I think there can be no reasonable doubt that the comparatively large meal enjoyed by him was the immediate cause of death. Whether it caused it mechanically by pressure on the embarrassed heart through the diaphragm, or reflexly through pressure on the vagus fibres in the stomach, or by pressure on the solar plexus, whether reflexly by "shock" owing to the gaseous contents of the intestines being suddenly expanded by hot porridge, or by the vaso-dilator of the abdomen being stimulated, and so depriving the heart of blood, I do not know. It is possible that death was caused by the warm meal stimulating the vagus fibres in the stomach, and so allowing rein to the accelerator fibres, causing a rise in the heart-rate which that organ could not continue, and so sank under the strain.

It is noteworthy in this connexion that many cases of sudden death from heart failure occur in elderly people hurrying to catch trains, etc., after a good meal. Especially is this the case with plethoric individuals taking insufficient exercise, who quite unknown to themselves have often fatty, weak hearts.—I am, etc., Liverpool, March 25th. Andrew S. M'Neil, L.R.C.P.S.E.

Liverpool, March 25th.

## TRAVELLING DELEGATES OF DIVISIONS.

SIR,—I wish to suggest that every Division of the British Medical Association appoint certain members, in number corresponding to the number of immediately neighbouring Divisions one for each. Such members should act as "travelling members," attend the meetings of the neighbour Division to which they are severally appointed, as well as their own, to convey and receive information, and so enable unity of action to be more certainly and readily attained.

Patients, especially near towns, more frequently migrate from one district to an immediately neighbouring district