inapplicability of stimulating diet, mercurial purgatives, and mineral and other tonics, to cases in which gastro-duodenal irritation, and congestion of the abdominal viscera, are always present in a greater or less degree. In lieu of these he recommends a diet better adapted to the digestive powers—the use of means calculated to remove abdominal irritation and congestion—and a residence in a mild climate, with frequent changes of air during the summer. In the early part of the summer he regards the interior of the country as the most suitable, and the sea-side towards the end of the summer, and during autumn.

We have confined our notice chiefly to the first part of this volume, because it is of at least as much importance as the second, and less likely to attract attention. The second part, which treats more immediately on climate, we must dismiss in a few sentences, but this we regret the less, as we can conscientiously recommend the whole work to the most attentive perusal. The introductory remarks to part the second contain some judicious advice to invalids, respecting ventilation, choice of residence, and management of the general health. The various climates of Great Britain, the Channel Islands, France, Italy, Switzerland, the Mediterranean, and the islands of the Eastern and Western Atlantic, are then reviewed in succession. A large appendix is added, containing:—1. A view of the climates of the Southern Hemisphere, as the Cape of Good Hope, Australia, and New Zealand; 2. Remarks on the medicinal application of the principal mineral waters; and 3. Meteorological tables, bearing on the subject of climate, and illustrated by notes. In taking leave of our author, it is but justice to say that the work is written in a very clear and pleasant style, and that the general reader, as well as the physician, will find much that is interesting and instructive in its pages.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, June 8, 1841.

Dr. WILLIAMS in the Chair.

READ A PAPER ON THE ACTION OF POISONS,
BY JAMES BLAKE, ESQ.

THIS paper contains a confirmation of the author's researches on the action of poisons, the greater part of which have already been before the public. After some remarks on the manner in which researches should be conducted, the author observes, that the present question contains two elements distinct in kind, namely, a dynamical and a chemical problem: the former referring to the place where a poison acted, the latter to the molecular changes, which the presence of the poison in the blood gives rise to in

this fluid, or the tissue with which it is brought into contact. The former question came before him at present. It has formerly been shown that sufficient time always elapses between the application of a poison or its injection and the first symptoms of its action, to allow of its being carried to the brain, and also that contact of the poison with a large surface was not sufficient to give rise to any general symptoms, as long as its diffusion through the body is prevented. The author now proves, that in every instance the rapidity of action of a poison is in proportion to the rapidity of the circulation. With a view to this proof, experiments have been performed on different species of animals, in which the time required for the blood to circulate from one part to the other differed greatly. For should a poison which acts on the nervous system only produce symptoms when applied to the nervous centres, it must require a longer or shorter time before it shows evidence of its action, according as the circulation is more or less rapid, or the course which the poison has to run be longer or shorter. Experiments were performed by the author on horses, dogs, fowls, and rabbits, these animals offering extreme differences as regards rapidity of the circulation of the blood.

It is shown by experiments, that a substance injected into the jugular vein of a horse, arrives at the capillary termination of the coronary arteries in ten seconds; of a dog in twelve seconds; of a fowl in six seconds; of a rabbit in four seconds. Having made these statements, the author points out from experiments, that in these animals the time required for a poison to act is in proportion to such rapidity of the circulation; but also, that in every instance sufficient time elapses between the application of a poison and the appearance of the first symptoms of its action, to allow of its reaching the nervous centres.

The author concludes by noticing some facts which tend to establish a connexion between the chemical composition of substances and their physiological action; the chemical action on the blood of such salts as destroy the irritability of the heart; the analogous effects of salts of the same base; the analogous actions of isomorphous substances on the animal tissues, and the difference between the effects produced by poisons, according as they are derived from organic or inorganic substances.

ACADEMY OF SCIENCES.

Paris, May 31, June 7.

STATE OF THE URINE DURING PREGNANCY
AND DISEASE.

M. DONNE' presented a paper, the object of which was to show that the urine of pregnant women generally furnishes certain characters by which the existence of pregnancy may be ascertained. From a great number of experiments, M. Donné has ascertained that the urine contains much less free acid, phosphate and sulphate of lime, in pregnant than in other women. This circumstance modifies in a very remarkable manner the microscopic crystals of the salts contained in the urine, and enables us to determine with great probability, if not absolute certainty, the existence of pregnancy. M. Donné has applied the method