

speaking about the laboring classes he pointed out how much was got from the industry of children and the advantage of employing them at an early age. Indeed, many were sent out at ages of from six to ten years, from workhouses and contracted for, commonly working in factories from twelve to even sixteen hours daily, as was proved by parliamentary inquiry. Curiously, as a result of this industrial development, there took place the immense increase of negro slavery in America which, as pointed out by John W. Daniel, of Virginia, in his famous oration on Jefferson Davis, had been protested against in 1727 by South Carolina, and prohibited by law in Georgia, in 1760, while Virginia taxed every owner \$10 per slave. Indeed, as remarked by Lecky, it seemed, at the time of Washington, "likely to be extinguished by an easy and natural process." How slow, in the face of the growing influence of the great centres of manufacture in England was the growth of factory acts and public health legislation, we shall see as we trace the progress of the nineteenth century.

As regards the evolution and progress of public health during the present century there would seem to be four periods more or less distinctly marking its growth and that of those sciences which form component parts of it. These are: (1) the period of investigation, extending to about 1830; (2) the period of agitation, extending to 1850; (3) the period of legislation to 1875; (4) the period of elaboration and development. We shall refer briefly to each of these.

1. *The Period of Investigation.*—The opening year of the century is notable because of the establishment in London of the Royal Institution, originally conceived as an establishment for the benefit of the poor. This institution has a special claim upon the interest of this association, since its foundation was due to the efforts of Benjamin Thompson, a Royalist American, who, going to Europe after the Revolution, had engaged in various services in different countries. His labors were in the field of philanthropy, where he specially endeavored to have science applied to domestic economy, and especially for having cheap foods supplied for the needs of the poor in London and other large cities. It was intended to institute a system of popular lectures in order that a practical knowledge of inventions, and of the means of obtaining the comforts and conveniences of life might be rapidly diffused. Humphrey Davy, then a budding natural philosopher, was fortunately appointed first lecturer on chemistry, and succeeded in a remarkable way in interesting the public in his discoveries, and in popularizing science in England. A lecturer of marvellous power, he traced out in the introductory lecture of 1802 the resources of science for humanity, and dwelt upon its dignity and nobility as a pursuit, and upon its value as a moral and educational force. The lecture created a sensation, Davy