

condition it was in before the importation of guano and bones commenced; and after England shall have robbed the cultivated lands of Europe even to complete exhaustion, and taken from them the power to furnish her longer with corn and manure, then she will not be richer than before in the means of producing corn and wheat, but will, from that time forth, become even poorer in these means.

By the importation of guano and bones the population has, however, in consequence of the increased production of corn and meat, increased in a greater ratio than would have been possible without this importation of manures, and this population will make upon the rulers of the State their natural demand for food.

If men do not deem it desirable that the balance between population and the supply of food be restored by means of exterminating wars and revolutions, (in which the want of food has always played a certain part,) or by means of wasting plagues, pestilence, and famine, or by emigrations *en masse*, then should they reflect that the time has arrived for getting a clear view in regard to the causes of the existence of the increase of population. A very little reflection will lead to the conviction that the relations of populations are governed by a great and comprehensive natural law, according to which the return, duration, increase or diminution of a natural phenomenon depends upon the return, duration, increase, or diminution of its conditions. This law governs the return of the harvest upon our fields, the maintenance and increase of the population, and it is easy to see that a violation of this natural law must exert upon all these relations a pernicious influence, which can be set aside in no other way than by the removal of its causes. If, then, it is known that certain existing relations work deleteriously upon the fields, if it can be foreseen that their continuance must bring about the ruin of agriculture, if there is but a single one of all the means which have hitherto resisted this deleterious influence and made it less sensibly felt, which can be safely relied upon to secure a perpetual fertility to our fields, and it is certain that this means, by a simple change and improvement of the existing deleterious state of things, can be obtained, then it becomes us to think whether a nation should not summon up all her intellectual and material resources in order to preserve these fundamental conditions of her welfare.

It has been maintained that the recovering of the manure elements out of the sewers in the large cities is impracticable. I am

not ignorant of the difficulties which stand in its way—they are indeed very great; but if the engineers would come to an understanding with the men of science in relation to the two purposes—the removal of the contents of the sewers, and the recovery of their valuable elements for agriculture—I do not doubt that a good result would follow. Intelligence, in union with Capital, represents a power in England which has rendered possible and practicable things of much greater apparent difficulty. I look forward with deep concern to the solution of the “sewerage question.” For if this question is decided in Great Britain without regard to the wants of agriculture, we can scarcely hope for anything better upon the continent.

Permit me to add still a few words in relation to the leading article of the *Times* of the same date, in which the one side of this question is taken up with great clearness, while the author of the article seems to have views not quite correct in regard to its bearing as it presents itself to my mind. The mistake into which he has fallen arises from his confounding the condition of a State with that of its population.

In the natural sciences we know nothing of a State, of its might or its feebleness. We know only of lands, their geological formation, their climate and soil, and whether the soil contains the natural conditions for the subsistence of man and beast. In places where these conditions are abundantly present, and geological circumstances do not hinder their intercourse, men cannot be exterminated. The most wasting war cannot rob a land of the conditions which nature has given, nor can peace give them to a land which wants them.

If Mr. LAYARD is disposed to answer the question put to him in the article of the *Times*, he will doubtless say that the decay of the admirable system of irrigation rendered the permanent maintenance of a great population in Assyria and Mesopotamia impossible. Countries may be fruitful, and become capable of sustaining a large population, when certain resisting influences, which in their unimpeded working make the cultivation of the soil impossible, are overcome by human intelligence; or when a land has all the conditions of productiveness except one, and then receives the one which it lacked. If Holland were without her dikes, which must be kept up at great expense, she would produce neither corn nor meat; the land would be uninhabitable. In a similar manner the inhabitant of the African oasis protects his grain fields by dikes against the storms of the desert,