

to the cultivation of land in America, its condition arises from a variety of causes, and very few considerations will enable you to understand how it has come about. If you ask yourselves to what class does the majority of emigrants belong; you will have no difficulty in coming to a conclusion. Look at the great crowds of people who go from Ireland, from the Highlands of Scotland, and the hundreds of thousands proceeding from the great towns of England and Scotland—ask yourselves of what class they consist—what amount of intelligence and agricultural knowledge they possess; and in the answer to this you will at once find the key to the state of the land in the whole northern part of America. The people who first settled in America knew nothing of agriculture, and their descendants generally copied the habits of their predecessors. Thus it came that their sons knew nothing; out of the way of books—out of the way of instruction, supposing them to have even read books which gave instruction, they would have made very little progress; but we must suppose them not to have had an opportunity of gaining knowledge and therefore instead of advancing, they have retrograded in agricultural knowledge and practice. Now, what has been their procedure—by what kind of procedure have they brought about the state of exhaustion to which the soil has been reduced? Of course, in speaking of the exhausted soil, I do not refer to the virgin soil which has never received the plough or the spade, but to the soil under their cultivation, and which they are now exhausting. When I tell you how the land is cultivated, you will understand how this exhaustion has been produced. The forest is in the first place cut down and burnt, after which the ashes are scattered, and a crop of wheat and oats is sown. When this crop is cut down another is sown; but they do not always remove the straw—they do not trouble themselves with any manure. The second year they sow it in succession. When they can take no more out of it, they either sow grass seeds, or as frequently let it seed itself. They will then sometimes cut hay for 13, 14, 16, 18, or 20 years in succession, in fact as long as they can even get half a ton an acre from it. And you may suppose what is the natural fertility of the land when they are able to obtain as much as three or four tons per acre at first and go on cutting it for 12 years. They will probably have two tons an acre during a 1 that length of time. The land is then broken up, and the crop of oats taken—then potatoes—then a crop of wheat—and then hay for 12 years again, and so the same course is repeated. Now this is the way in which the land is treated—this is the way in which the exhaustion is brought about. This exhaustion exists in Nova Scotia, New Brunswick, Lower Canada in Upper Canada to a considerable extent, over the whole of New-England, and extends into

the state of New York. The next inquiry which you will make, is, what steps they are taking to remedy this state of things? Are they doing anything to bring back the land to a productive condition? and, in order to do this, are they taking steps to put any knowledge into the heads of those who cultivate it? Now, on those points I am happy to say that I can speak very favourably. They possess the spirit of their forefathers, and having become conscious of the state in which agriculture really is, they are endeavouring to improve it. But you will ask what inducement have they to make these exertions? They grow corn enough—they have no want of agricultural produce as we have; but when I tell you what is the condition of New England in reference to the Western States you will understand. All the new States—all the virgin land, when it is cultivated, yields a crop for little or nothing, but it cannot yield by means a large crop. In the State of Michigan, between Lakes Superior, and Erie, the average produce is not 12 bushels an acre, but it is got for nothing. In New Brunswick, which is very thinly populated, I was told that 10 bushels an acre paid well; but the produce is not large. In the Western States they are enabled to produce it very cheaply.

Mr Hay.—What was the value of a bushel of Wheat?

Professor Johnston.—At the time I was there the price varied from 60 to 80 cents a bushel, *i. e.*, 100 cents being 4s 4d. In the extensive western states, and part of New York, where it is shipped to England, the price varies according to the distance. Now, the condition of things in the western States in reference to England is precisely the same as the condition of England in reference to the wheat-producing countries of the Baltic. The condition of the farmers is exceedingly bad, and in Maine, I was informed that they were all in a state of bankruptcy. The land is all mortgaged, which hangs like a mill stone round their necks, and is worse even than the state of the farmers in this country. They are thus unable to compete with the western parts of New York or Lake Ontario. You have all heard of the famous wheat of Genesee, where the land is more fertile than in any part of Great Britain, and I learned there that they are laying the land down grass, because they cannot afford to grow wheat. As a remedy for this state of things, they are establishing agricultural societies in the different states, and the legislature is providing funds to support these societies, and for the diffusion of knowledge. The central Society is in Albany, and to it the different branches send reports. The Legislature publish these in one thick volume, and circulate 20,000 copies gratuitously throughout the States. This central society asked me to give their annual address at Syracuse, and a course of Lectures before the legislature at Al-