mismanagement and neglect of the soil, inasmuch as it is only on rocky waste ground that the female insect will lay her eggs. The locust-plague is therefore the result of inadequate cultivation of the soil, consequent upon a deficiency of population, coupled with an insufficiency of trees; though their increase may be largely attributed to the Mussulman theory of resignation, which would not, in former times, permit their destruction on account of the belief that they were sent by the Almighty. For some years prior to 1862 the destruction of crops from this cause was very large, and the plan of egg-collection was then tried, without success, by the Turkish government. This led Mr. Richard Mattei, a land-owner of Cyprus, to commence a series of experiments, which resulted in the invention of his system of traps and screens. Mr. Mattei had the good fortune to secure the assistance of the Turkish governor, Said Pacha, a man of exceptional intelligence and energy; and in 1870, after long effort, the locusts were by this means almost exterminated. Not wholly, however; for in 1875 they reappeared, and, another governor being in power, they were allowed to increase until the time of the British occupation. Early in 1879, measures were adopted by the English government, both by the employment of Mr. Mattei's trap and screen system and by encouraging the collection of locust-eggs, for which they offered a considerable price. These measures have been completely successful, as the locusts that appeared last year were comparatively few in number, and did no appreciable damage, and any future visit may be looked forward to with complacency.

But the forests of the island also demanded and received the attention of the new authorities. The forests were placed under control, and the destruction of wood prohibited, moderate supplies being permitted for native wants. The indiscriminate pasturage of goats has been stopped, and a large number of trees have been planted, the chief species being Aleppo pine, cypress, carob, ailantus, oak, mimosa, eucalyptus, and Pinus pinea. The effect of these measures has been favorable; but the restoration of the forests must necessarily be a work of time.

Again, it was necessary to reform the administration of justice throughout the island. This was effected by a complete re-organization of the department of justice under the direction of the home government. The most salient features of the scheme were the formation of a court of appeal, composed of two qualified English judges, the appointment of an English judge to preside in every district, and the establishment of a number of village judges to deal with petty civil cases. It included also the adequate payment of the native judges, although their number was gradually reduced to a considerable extent, and likewise established a system of jail deliveries by judges on circuit, similar to that which prevails in England.

The effect of these and other less important reforms on the commerce of the island has been highly beneficial. The abolition of the tithe-farming system, and the adoption of the more generous as well as more politic measure, whereby the agriculturist was permitted to deal with his crop as he pleased, the collection of the tax being delayed till a later season, when he should have had ample time for the conversion into money of the produce of his holding, had a most favorable influence on the particular industries affected, and consequently on the trade of the island generally. The volume of foreign trade, which in Turkish times was estimated at £1 10s. per head of the population, amounted, in 1879, to £2; in 1880, to £2 10s.; and in 1881, to £3 per head, since which time steady increases have been recorded. The net result of British occupation to Cypriot commerce may be fairly estimated by a comparison of the respective imports and exports for 1878, the last year of Ottoman rule, with those of 1884–85. The imports for 1878 were £177,651; for 1884–85, £304,375. The exports in 1878 were £157,328; last year they amounted to £287,521; and the figures were still higher the year before, especially as regards the imports.

Mr. Hake concluded his paper with a few remarks on the further improvements which he deems necessary for the prosperity of the island. Leaving out of account all minor measures, such as developing certain crops, he thinks there are three things which remain for the English to do. The first is to become the purchasers of the fee simple of the island, instead of being tenants at will, as they are at present; the second is to spend money, even to the extent of getting into debt, in order to plant the moutain-ranges, and especially the northern one that runs down the Mesaorian plain; and the third is (again getting into debt, if necessary) the establishment of a railway from Morphou to Famagusta, leaving its after-development to time, and to put the harbor of Famagusta into proper repair for mercantile use.

JEVONS'S LETTERS AND JOURNAL.

MRS. JEVONS has done well to collect these letters and journals of her late husband. The world is always interested in the personal history

Letters and journal of W. Stanley Jevons. Ed. by his wife. London, *Macmillan*, 1886. 8°.

of its benefactors; and, in the case of those whose lives are uneventful, this can only be known from their own private papers and those of their friends. Jevons was not, indeed, a man of the highest genius, and his works are not likely to make an epoch in any department of knowledge; but they are fresh in thought and often original, and nearly always provocative of thought in his readers. Moreover, he wrote a clear and easy style, which makes his letters interesting from a literary point of view.

Most of the letters in the collection before us were written to his relatives and personal friends, though many of the later ones are addressed to correspondents in the learned world. The most interesting part of the book to us is that which treats of the author's education and his early labors in the mental and social sciences. William Stanley Jevons was born in Liverpool in 1835, and met his death by drowning, at Bulverhythe, near Hastings, in 1882; so that his life covered a period of not quite forty-seven years. His father was a merchant, but failed while Stanley was a boy, after which the family were in only moderate circumstances. Stanley's mother died while he was very young, and he was taught at home by a governess until he was more than ten years old, when he was sent to school in Liverpool. At the age of fifteen he went to London to attend University college school, and afterwards studied at the college itself till he reached the age of nineteen. At that time he was offered the position of assayer in the mint at Sydney, in Australia; and, though at first averse to taking it, he ultimately accepted and retained the post for four years. The duties of the office seem never to have been much to his taste, and he had not held it long when he began to entertain designs and aspirations which rendered a return to England necessary. What these designs were he makes known in a letter to his sisters. He writes that in his inmost soul he has but "one wish, or one *intention*, viz., to be a *powerful good* in the world. To be *good*, to live with good intentions towards others, is open to all. . . . To be *powerfully good*, that is, to be good, not towards one, or a dozen, or a hundred, but towards a nation or the world, is what now absorbs me. But this assumes the possession of the *power*. . . . I also think, that, if in any thing I have the chance of acquiring the power, it is that I have some *originality*, and can strike out new things" (pp. 95, 96).

It appears, also, from another of his letters, that he had also chosen the field in which he was to work; for he writes that he intends "exchanging the physical for the moral and logical sciences, in which my *forte* will really be found to lie."

With such aspirations as these, Jevons could not be content to remain in Australia; and accordingly in 1859 he left his post at Sydney, and returned to England by way of Panama and the United States. On reaching home, he returned to study at University college, where he remained till he had taken the degree of M.A., devoting himself mainly to mental and social philosophy. After finishing his studies, he was for some time in doubt as to how he was to get his living, but was soon offered a position as tutor in Owens college, Manchester, which he accepted, being then twenty-eight years of age. A few years later he was appointed professor of philosophy and political economy in the same institution, and not long afterwards he married.

He had now attained a position which enabled him to carry on his chosen work, and he had already published some essays which had given him a reputation as an economist and statistician. The most important of these was the one on the coal-question, in which he warned his countrymen that their supply of coal was not inexhaustible. These essays did not at first attract the notice he expected, and, as he had not then attained his professorship, he seems to have suffered much from depression of spirits. Yet he did not swerve in the least from his chosen path; for he writes in his journal as follows: "Whence is this feeling that even failure in a high aim is better than success in a lower one? It must be from a higher source, for all lower nature loves and worships success and cheerful life. Yet the highest success that I feel I can worship is that of adhering to one's aims, and risking all" (p. 218). The next day after this was written, he received a letter from Mr. Gladstone, warmly commending his pamphlet on the coal-question; and from this time onward his reputation continued to grow.

Of the author's works, however, we have no space to speak at length. We cannot accord him a place among the great thinkers of the world, and it seems to us that he tried to be more original than he had the power to be, though his works are very suggestive. His mathematical theory of political economy has not been accepted by any leading thinker, and has remained thus far without influence on the development of the science. He urges that economical phenomena can be treated mathematically, because they can be expressed in terms of more and less; but, in order to treat them mathematically, we must be able to say how much more or less, and this, in the case of human desires and efforts, is impossible. Again: Jevons seems to have thought, that, in his doctrine of 'the substitution of similars,' he had presented an entirely new theory of reasoning; whereas the

doctrine in question is the basis of every system of logic in existence, and necessarily so.

Jevons was perhaps a little too apt to present his thoughts to the public before he had given them time to mature, and hence some of his theories are crude and but half worked out. Indeed, he seems in some cases to have been aware of this himself; for he writes to one of his correspondents about the 'Principles of science,' in the following terms: "To the want of a psychological analysis of the basis of reasoning I plead guilty. . . . No doubt, to a considerable extent I have avoided the true difficulties of the subject; but this does not preclude me from attempting to remedy the defect at some future time, if I live long enough, and can feel that I see my way to a more settled state of opinion" (p. 322). But, unfortunately for him and for us, he did not live long enough to finish this and other tasks that he had projected; and it is sad to think how much the world may have lost by the death, at the age of forty-six, of a man of such freshness of thought, and courage of opinion, as Jevons undoubtedly showed.

THE RAILWAYS AND THE REPUBLIC.

CAN competition be so arranged as to prevent the more serious abuses of railroad power? Can it be made to apply to railroads as it does to most other lines of business? Fifty years' experience has seemed to show that it cannot. Mr. Hudson believes that it can; and he makes out a case which will appear plausible to those who are not in a position to understand the practical difficulties involved in his project.

Each year's history shows that under our existing system — or want of system — railroad managers wield an irresponsible power, dangerous alike to shippers and to the government. By arbitrary differences in charge they can ruin the business of individuals; by political corruption they can often thwart all attempts at government control. The history of the Standard oil company, which Mr. Hudson tells extremely well, furnishes an instance of both these things. The railroads made a series of contracts with the company to do its business at much lower rates than they would give to any one else; while the railroads and the company together were able to set at nought the plainest principles of common law, to defy legislative investigation, and laugh at state authority itself.

What is to be done under these circumstances? This is the question to which Mr. Hudson addresses himself. He does not fall into the extreme of advocating state ownership. He has too strong a sense of the dangers of government management to believe that political corruption could be avoided, or enlightened economy secured, by a measure like this. Admitting, then, that railways are to remain under private ownership, how are their abuses to be brought under control? Almost every writer has his own notion on the subject, and his own individual shade of opinion; but we may group them under three main heads:—

1. There is one class of writers who insist that things are well enough as they are; who say that the reduction in rates under our present system has been so great, and the development of the country so rapid, as to outweigh any incidental evils which may exist. They say that the most we can possibly think of doing is to prohibit a few of the worst abuses, and perhaps secure a very moderate amount of publicity; and that other things will take care of themselves. This is the position of writers like Stuart Patterson or Gerritt Lansing.

2. Many of the more enlightened railroad men, like Albert Fink, G. R. Blanchard, or Charles Francis Adams, jun., do not deny the existence of most serious evils; but they attribute them to unrestricted competition, which favors competing points at the expense of local points, or places solvent roads at the mercy of bankrupt ones. They favor legalizing pools, and limiting the irresponsible construction of new roads, and think that the public interest would be best served by a responsible combination of railroads, with a commission to see that the interests of the shippers were not neglected.

3. On the other hand, Mr. Hudson insists that we have, not too much competition, but too little; that the abuses incident to its partial and irregular working can be best avoided by enabling it to act everywhere instead of nowhere. This he proposes to do by allowing others besides the railway company to use the track, on payment of a just and reasonable toll. He argues strongly to prove that this plan is not merely equitable, but practicable, and that each of the other positions is wrong, both in fact and in morals.

He has no difficulty in breaking down the arguments of the first group. The men who insist that railroad management is a private business, with which there should be no interference, and that all is well enough as it is, are every day becoming fewer. The really difficult conflict is against those who admit the evils, but who say that the remedy is to be found in well-controlled combination rather than uncontrolled competition. Mr. Hudson insists that combinations perpetrate outrages which individual roads could not perpe-

The railways and the republic. By JAMES F. HUDSON. New York, *Harper*, 1886. 8°.