

ject, but which, unfortunately, has impressed itself but little on the public mind—is, that there is no one solution of the railroad problem, and no one remedy for the evils which exist. The problem is a vast and complicated one: in truth, there is not any one problem. There are a number of different problems; and it is not the least of the merits of this book that it clearly distinguishes them. Perhaps the best part of the book is the discussion of the most difficult of them all,—the question of railroad-rates. Mr. Hadley makes a plea, unanswerable in its essentials, in favor of the much-maligned and much-abused principle of charging ‘what the traffic will bear.’

Some things we have learned on these problems; but a great deal more must be learned, and learned chiefly from experience, before the railroad system settles down into a permanent form. For example, it is pretty well agreed, even in this land of non-interference, that government regulation in some form is desirable. Almost every state in the union has its railroad commission. But how far public interference shall go, is quite an open question. There are those who believe that it should go far, and that the tendency is and should be toward eventual state ownership and management. German economists have adopted this view pretty generally, and they have followers in this country. They may be right; but experience up to the present time is by no means clear in favor of their view. Mr. Hadley, in his chapters on the railroad experience of European countries, and especially in his concluding chapter on the results of state railroad management, shows that, even in continental Europe, the question of state railroads is by no means settled. Only in Prussia is state management an established fact, and apparently a success. But in Prussia the conditions are peculiarly favorable; and even there the future must be awaited, before we can judge of the system. How far public regulation can go and ought to go in this country, at the present time, is still more an open question. Mr. Hadley evidently believes that a federal railroad commission is pretty sure to come in the future, and believes it to be desirable. But he does not commit himself as to the extent of the powers it should have, although he presents strong reasons for its having, at least at first, only advisory, and not judicial or administrative powers.

In his chapter on competition and combination, Mr. Hadley expresses strongly his opinion that the economic principles which apply to most forms of production and trade do not apply to railroads. In fact, he says that the law of competition, as laid down by Ricardo and his followers, is ‘false in theory,’ so far as railroads are concerned. I

must confess that this seems to me to be overstraining the matter. Whether one considers the theory to be false, depends very much on what is one’s conception of it. Correctly stated, the theory of Ricardo and of ‘orthodox’ economists, simply says that, given such and such premises, such and such conclusions follow. If the premises do not correspond to facts, the theory does not apply. Perhaps it ‘breaks down;’ but does it become ‘false in theory’? No doubt the premises correspond, in important respects, to facts, in a less degree in the case of railroads than in almost any other branch of industry. The theory, then, fails to apply in a corresponding degree, and we must approach the economic problem from other points of view. But Mr. Hadley himself points out that the theory is by no means without its force and application, even in railroad matters. He tells us in one place that, “where the profits of an existing concern are high enough to tempt it, a competitor will come into the field” (p. 103), and refers to the West shore road as a conspicuous instance. And elsewhere he tells us that when the legislature of Wisconsin, by the Potter law, fixed rates at unremunerative figures, railroad construction stopped, facilities on existing roads could not be kept up, and the state was compelled to repeal the law. “The laws of trade could not be violated with impunity” (p. 135). Are not these applications of Ricardian laws, at least after some rough fashion? No doubt we cannot solve all economic problems by these laws, and no doubt, in some directions, the development of industry in modern times requires us to apply them more and more cautiously. But we should not therefore throw them entirely overboard, as if they did not yield us any help at all.

But this is a question which interests chiefly the economic student; and perhaps, after all, it is only a question of choice of language. There is no ground for substantial difference with what Mr. Hadley has to say in his chapter on competition and combination. There, and throughout the book, are the marks of thorough study and clear-headed thinking.

F. W. TAUSSIG.

MINOR BOOK NOTICES.

Reiseerinnerungen aus Algerien und Tunis. Von Dr. W. KOBELT. Frankfurt-am-Main, Diesterweg, 1885. 8°.

It is curious to contrast this ponderous and thoroughly scientific work of a German physician with that of the vivacious Monsieur Melon, which we noticed some time ago,—the one so chatty and superficial, the other so dull and accurate. We read the Frenchman’s book, and cast it away without the slightest thought of ever looking at it

again. We laid Dr. Kobelt's volume aside with the intention of referring to it whenever any thing is wanted concerning Algeria and Tunis. No doubt the Germans have a lack of perspective. To many of them a fact is a fact, to be investigated and recorded; and their books are therefore often wearying in the extreme. But, after all, they do the work. They accomplish results which never have been and never will be accomplished by the French method of grabbing at whatever is picturesque and entertaining, and flinging the rest contemptuously aside. In the present volume the author has done his work conscientiously and well. Portions of it are dreary reading; but there are many interesting chapters. Especially worthy of mention are three chapters on the ethnology of the countries visited, — the eighth, on Algeria and its inhabitants; the eleventh, dealing with the Kabyles; and the twenty-third, on the Tunisians. His route was *via* Marseilles; and the first chapter, describing that city, is one of the very best in the book. In short, American travellers who intend writing up their journeyings would do well to imitate in some measure the methods of Dr. Kobelt. The volume is well illustrated, both with photographs of scenery and of natives. It contains also an appendix of considerable value, by Dr. O. Boettger, describing the reptiles and amphibia collected by the author in North Africa. Besides the lack of an index, the volume is deficient in that it contains no map. This is the more to be regretted, as the learned doctor's route is by no means easy to follow on any but a recent German map of Algeria and Tunis, and recent German maps of those regions are to be found in this country only in our larger libraries.

Römische chronologie. Von L. HOLZAPFEL. Leipzig, Teubner, 1885. 8°.

In his 'Roman chronology' Dr. Holzapfel aims at correcting Roman dates, as commonly given, by a minute process, which, at least as regards the earliest dates, is certainly its own best refutation. He deals also with the various Roman eras in current use among the ancients. Finally, he attempts to give a detailed account of "the course of the Roman calendar down to the time of Caesar's reform." In 1859, Theodor Mommsen, guided by a practical good sense, which Dr. Holzapfel hardly possesses, dealt with all these questions in his 'Roman chronology.' Though in many details Mommsen's conclusions can no longer be accepted, notably as regards the chronological significance of the appointment of a dictator *clavi figendi causa*, it is still true that Mommsen's book is the best upon the subject. The cardinal fault of Dr. Holzapfel's work is, that it is inextricably incomprehensible without the unremitting labor of

constant reference to what has been written by others. The reader is distressed by a needless clatter of controversy, which seems to indicate that Dr. Holzapfel does not sufficiently trust his own conclusions. All who are not actually bearing the brunt of the chronological fray will find this book unrefreshing and confusing; and those who are well read in the whole subject may well pause before tormenting themselves with our author's argumentations. The book is conspicuously lacking in neatness of statement. There is no sense of proportion, no prospective. The 'peasants' calendar' and the business year of ten months are practically ignored. And yet what could be of more importance than the former, in any account of the conditions which made Caesar's reformed calendar a possibility as well as a necessity? It is to be lamented that Dr. Holzapfel could not find time to make his book both shorter and more complete. This 'Roman chronology,' with its tediously paraded controversies and its sophomoric list of emendations, ostentatiously placed at the end, is an overgrown 'doctor's dissertation' rather than a desirable book of reference.

A text-book of inorganic chemistry. By VICTOR VON RICHTER. Authorized translation by Edgar F. Smith. 2d American from the 4th German ed. Philadelphia, Blakiston, 1885. 16°.

THAT Professor Smith's translation of Richter's useful text-book of inorganic chemistry has passed to a second edition, is perhaps sufficient testimony to its value. Much has been rewritten, and some new matter incorporated; but the work would have gained in clearness and smoothness if more attention had been paid to the rendering of the sense, rather than the phraseology, of the original.

Spectrum analysis. By Sir HENRY E. ROSCOE. 4th ed. by the author and by Arthur Schuster, Ph.D., F.R.S. New York, Macmillan, 1886. 8°.

THE fourth edition of Roscoe's 'Lectures on spectrum analysis,' wholly revised, almost wholly rewritten, and including concise accounts of such recent advances of importance in spectroscopy as lend themselves to popular treatment, follows closely the plan and arrangement of its predecessors, and appears in the same elegant guise. The character and scope of the work are too well known to need extended comment.

ST. PETERSBURG LETTER.

ON the 11th of February there was a special meeting of the Geographical society, in honor of N. M. Prjevalsky. The large hall of the Michael palace, where the meeting was held, was crowded by a distinguished audience. In a short preliminary address, the vice-president, P. P. Semenov, spoke of the merits of the traveller, and reminded