certainly going to great extremes to say, that, "without this definiteness of idea, no knowledge of the slightest value can exist." However, no harm would probably be done by this excess of what is certainly in itself a merit, were it not that the constant endeavor to insure the student's good grip of his tools throws into the background all considerations of elegance, and often interferes with unity of treatment and a harmonious development of the subject. In these features, Professor Minchin's work leaves much to be desired: but its comprehensiveness, the fulness and clearness of its explanations, and its richness in examples, make it extremely valuable both as a text-book and as a work of reference. Its usefulness in the latter capacity has been increased by the addition of an alphabetical index.

ROYCE'S CALIFORNIA.

This work is the seventh in the series of 'American commonwealths,' now in course of publication under the editorship of Mr. Horace E. Scudder. The author, who is already known to the readers of *Science*, is a native of California; and his work, as he himself tells us, has been a labor of love. It deals but slightly with the early history of the country, when it was under Mexican rule, but takes up the subject at the time when our government was seeking to gain possession. This was in 1846; and the work closes with the final establishment of order in the state in 1856, thus covering a period of ten years.

The work is properly divisible into two parts, the first treating of the conquest of the country by the United States, and the second of the politics of the state itself after the war was over. The reviewer is obliged to say that the book has grave faults of style and treatment, particularly in the earlier part. The style is verbose, and the chapters that treat of the conquest are carried to such a length that few persons will have the patience to read them through.

Mr. Royce, like most other people, regards the Mexican war and its accessories as little creditable to the American nation; though, of course, he recognizes the good results that have actually flowed from it. He thinks, too, that we might have got California by peaceful means, or at least with the consent of its inhabitants, if we had pursued the right course; and that we failed in this, he thinks is due to the misconduct of some of our military and naval officers. He is specially severe on Captain Frémont, whom he regards as mainly responsible for the fighting that occurred in Cali-

American commonwealths. California. By Josiah Royce. Boston, Houghton, Mifflin & Co., 1886. 16°. fornia, and consequently for the animosities and race-hatreds that it engendered.

In the fourth and fifth chapters, the author treats of the 'struggle for order' between the lawabiding citizens on the one hand, and the criminal elements on the other. Congress having neglected to provide a permanent territorial government for California, the people met of their own motion in the autumn of 1849, and organized as a state, which was soon after admitted into the union. When this had been done, however, the struggle with the lawless elements of society was only just begun; and it took seven years longer to reduce the whole state to an orderly condition. causes of the long continuance of social disorder were, in Mr. Royce's opinion, two, — the general sense of irresponsibility due to the irruption of a crowd of fortune-hunters; and the animosity of the American settlers toward the Mexican inhabitants on the one hand, and foreigners on the other; to which we would add the political incapacity of the Mexican inhabitants themselves.

In his last chapter the author treats briefly of the land question in California. When our government took possession of the country, there were many tracts of land the ownership of which was doubtful, and this would have caused much difficulty in any case. But our people saw fit to treat the ownership of all tracts as doubtful, and compelled the landholders to prove their titles in the courts as a prerequisite to having them recognized. The courts, however, sustained the vested rights of the proprietors; and Mr. Royce thinks that the whole history of California "has illustrated the enormous vitality of formally lawful ownership in land."

According to official statistics, it appears, says the Journal of the Society of arts, that on the 31st of December, 1881, 382,131 persons were engaged in manufactories in Italy. Of these, 219,844 were spinners (69,447 being children); 77,779, weavers (13,628 children); and in printing 15,499 (618 children) were employed. In 1876 there were 229,538 weavers who worked at their own homes, chiefly in Sicily, Sardinia, Calabria, Apulia, and the Marche of Ancona.

— Nature states that during the present summer a university will be opened at Tomsk, in Siberia, the first of its kind in this part of the Russian empire. At first it will consist of two faculties, — an historical-philological one and a physical-mathematic. It already possesses a library with fifty thousand books, a very valuable paleontological collection, presented by Duke Nicolaus of Leuchtenberg.