

the evil consequences of unrestrained competition" (p. 35).

Unrestrained competition, Professor Adams argues, results in important evils of three sorts. First, it tends to bring the moral sentiment pervading any trade down to the level of that which characterizes the worst man who can maintain himself in it. Secondly, it renders it impossible for men to realize the benefits that arise, in certain lines of business, from organization in the form of a monopoly. Thirdly, the policy of restricting public powers within the narrowest possible limits tends to render government weak and inefficient; and a weak government, placed in the midst of a society controlled by the commercial spirit, will quickly become a corrupt government. In these three important respects *laissez-faire* fails. Therefore the principles for state interference which Professor Adams lays down are three, one corresponding to each of the above evils: 1°. The state may determine the plane of competitive action; 2°. The state may realize for society the benefits of monopoly; 3°. Social harmony may be restored by extending the duties of the state.

To use the author's own language, "This essay may be regarded as a plea for the old principle of personal responsibility as adequate to the solution of all social, political, and industrial questions; but it is at the same time urged that this principle must be accepted fearlessly, and applied without reserve. . . . [Monopolies], it is claimed, should be controlled by state authority, and it is suggested that the American theory of political liberty will lead men to rely as far as possible upon the efficiency of local governments in the exercise of such authority" (pp. 84, 85).

In some particulars we find ourselves obliged to differ with the author, both as to principles and as to applications; but his argument is clear and straightforward, and we bear cheerful testimony to its ability and its candor.

GRASSES OF NORTH AMERICA.

It has sometimes been urged, as an argument against the establishment of agricultural schools, that there were no adequate text-books in which the student might find, systematically arranged and classified, the knowledge of agricultural matters acquired by the farmer on the one hand, and the student on the other. There has been, to, a sufficiently large grain of truth in the accusation to cause us to welcome such additions to agricultural literature as Storer's 'Agriculture,' recently noticed in these columns, and Beal's 'Grasses of North America.' Both these books, in quite

Grasses of North America, for farmers and students. By W. J. BEAL. Vol. i. Lansing, Thorp & Godfrey, pr. 8¢.

different ways and in quite distinct fields, go far to fill what were serious gaps, and the future student of agriculture will owe both authors a debt of thanks.

Although written by a botanist, and informed throughout by botanical knowledge, 'The grasses of North America' is a book for the farmer rather than for the botanist. The chapters upon the structure, form, and development of the grasses, the power of motion in plants, plant growth, and on classification, while containing much valuable matter, are really preliminary to the succeeding chapters upon more immediately practical topics.

In these the author has collected the results and opinions of the leading authorities of this and other countries, and added much valuable original matter upon such topics as the adaptation of the various cultivated grasses to different purposes and different conditions of climate and culture, the preparation of the soil, the care of grasslands, making hay, etc. A chapter upon the insect enemies of grasses and clover, by Prof. H. J. Cook of the Michigan agricultural college, and one on the fungi of forage-plants, by Prof. William Trelease of the Shaw school of botany, St. Louis, conclude the book, which deserves a wide circulation among the farmers and students for whom its title designs it. It should be added that the abundance of excellent illustrations greatly adds to the value of the book. A second volume is in preparation, to contain the description of all known grasses of North America, with full notes on their value for cultivation.

THE initial publication of the Henry Draper memorial is issued by Professor Pickering as the 'First annual report of the photographic study of stellar spectra, conducted at the Harvard college observatory.' With the Draper 11-inch photographic telescope, spectra have been obtained which we believe have not been equalled elsewhere; and Mrs. Draper has decided to send to Cambridge a 28-inch reflector and its mounting, and a 15-inch mirror, with which Dr. Draper's photographs of the moon were taken. But, what is more important, Mrs. Draper has not only provided the means for keeping these instruments actively employed, some of them during the whole of every clear night, but also of reducing the results by a considerable force of computers, and of publishing them in a suitable form.

— The tenth annual meeting of the American society of microscopists will be held in Pittsburgh, Penn., commencing Tuesday, Aug. 30. Prof. W. A. Rogers, Waterville, Me., is the president; and D. S. Kellicott, Buffalo, N. Y., secretary.