former chief of the Weather Bureau that the hour of observation be given at the top of the map; and the suggestion was adopted; but the type used is small and at best this is only a makeshift. If the isotherms are to have true comparative value, diurnal corrections should be applied, whatever scale be used to express values.

At Blue Hill Observatory, no less than three scales have been used and we are now considering a fourth. Beginning with 1891, the Centigrade scale displaced Fahrenheit in our published summaries. In 1914 the Absolute scale displaced the Centigrade, the first of the three figures being written once in tabular work at the head of the column. The use of minus signs for low temperatures, frequent in winter months for surface readings, and in all months with upper air readings, is thus avoided.

The objection made, however, to the length of the Centigrade division holds also for the Absolute scale and therefore the writer suggested¹ a scale based on the Absolute system but with the present 273° marked 1,000°.

For many reasons the freezing point is important. The new scale emphasizes this point. The boiling point is not so definitely marked but the whole system has the advantage of flexibility and consistency. For thermodynamic problems it is an ideal arrangement.

ALEXANDER MCADIE

SCIENTIFIC BOOKS

American Civilization and the Negro. By C. V. ROMAN, A.M., M.D., LL.D., Editor of the Journal of the National Medical Association, etc. Philadelphia, F. A. Davis Co., 1916.

This book is obviously prepared and published as an antidote for Shufeldt's book on the negro, issued last year by the same firm.¹ As such, it is a complete and amusing success. The word "amusing" is used advisedly, for Dr. Roman has by imitation without comment emphasized many of the weaknesses and defects of Dr. Shufeldt's book. Moreover like

¹ Physical Review, N. S., Vol. VI., No. 6, Dec., 1915.

¹ See Science, N. S., Vol. 42, p. 768.

most of his race, Dr. Roman has a keen sense of humor and real skill in the use of witty phrases, so that many of his aphorisms are exceedingly clever. From the title-page, with its long list of degrees, honors and positions, following the author's name, to the very full glossary at the end of the book, Roman has taken his cue from Shufeldt, with such goodnatured appreciation of the Caucasian author's failings that any one who has read both books can not help but be amused. In no respect is this done better than in the matter of illustrations. In neither volume is there any particular connection between text and plates, but whereas Shufeldt's figures are deliberately chosen to exaggerate the animal nature of the negro and make him repulsive to the reader. Roman's illustrations are selected to exaggerate his intellectual and spiritual achievements and make him most attractive.

Neither volume is in any real sense a scientific book, but whereas Shufeldt's pretends to be, Roman's makes no such claim. The latter author says truly in his Preface: "This book is written without bitterness and without bias" and in the hope that it "may increase racial self-respect and diminish racial antagonism." The good nature and self-control of the author are notable and his evident familiarity with the literature of the subject is equally so. There are very few references to Shufeldt, Bean or other negrophobists, but many quotations from Boaz, Murphy and Cable, real and sympathetic students of the race problem. The chief contention of the author is that there is no superior race, but that there are superior individuals, and that the effort of all races should be to increase the number of these superior individuals of whatever race, while weeding out the inferior. He admits frankly that at the present time, the whites average higher than the negroes but he very properly claims that there is far less difference between the best whites and the best negroes than there is between the better and worse elements of either race. His chief protest is against the utterly unfair and unscientific method of treating all colored people alike because they are colored, and he emphasizes the importance of encouraging the development of the exceptional individual in every race.

The fifteen chapters which make up the volume are of rather unequal merit and seem to have no natural sequence. This defect of arrangement is emphasized by faults of style. The writer is discursive and tends to glowing rhetoric, "glittering generalities" and overmuch interpolation of poetry and emotional anecdote. There is too much repetition and iteration, oftentimes on trivial points. In spite of all this, the book is readable and enjoyable because of the author's skill in putting telling points in brief, pithy sentences. In discussing physiognomy as a criterion for judging men, he says: "As a man thinks, not as he looks, finally fixes his status," and again, referring to facial angles and jaw form, "Thoughts and not bites win the battles of life." In reference to the origin of the southern negroes, we find these apt words: "The question then is, not where did he start from, nor how long has he been on the road, but has he arrived?" In chapter ten, "The Solution," probably the best chapter in the book, there is an admirable plea for the suppression of those people who, and things which, tend to encourage racial friction. The following deserves quotation. "Dixon and Johnson have been drawbacks to their race and country. It was an unfortunate thing for the country that popular notice was given to the Leopard Spots or the Reno Battle. If neither had been noticed the subsequent 'bad eminence' of the chief actors would not have marred the country's history."

The frankness and fairmindedness of Dr. Roman are constantly in evidence. His appreciation of the point of view of the best southern whites is delightful and most encouraging. Referring to their claim of "the absolute and unchangeable superiority of the white race" he says: "Fundamentally erroneous and mischievous as I believe this assumption to be, I am not disposed to quarrel over it with such men as Messrs. Page and Murphy." "From different starting points, Mr. Page and I reach the same conclusion: 'Our plain duty is to do the best we can to act with justice and a broad

charity and leave the consequences to God." One other quotation is necessary to reveal the point of view of the best southern colored men on that bugbear "social equality." Dr. Roman says: "I know my people, their hopes, their fears, their aspirations and their desires; and from my youth up I have preferred a discreet silence to false or dishonorable speech. With all candor and earnestness I say to the American public: the negro has no desire to break over social barriers. In this regard he is if possible more strongly prepossessed in favor of his own than the white man. In these matters the negro is not only pleased but happy to work out his own equivalent rights. But in civil, political and economical matters the negro insists and for the good of the country ought to insist upon equal, not equivalent, rights." If this is not a scientifically impregnable position, your reviewer fails to detect its weakness. It seems to him obvious that the one possible solution of the race question lies in strengthening racial self-respect and mutual interracial confidence. For this reason, all legislation looking towards segregation of either race is sadly mistaken and postpones indefinitely the solution intelligent men on both sides are seeking. As Dr. Roman truly says: "White ignorance is the most serious menace in the race situation; for this ignorance is in power and hopes to benefit itself not by finding more light but by increasing darkness." Colored ignorance is much less mischievous because so much less powerful, but it is of course a serious menace. Racial self-respect should be greatly promoted among the negroes by the publication of Dr. Roman's book, and racial comity should be likewise advanced. For there is as much for the white race in the volume as there is for the author's own people.

HUBERT LYMAN CLARK

The Elements of Surveying and Geodesy. By

W. C. POPPLEWELL. Longmans, Green and Co., London, 1915. Pp. ix + 244, illustrated.

The author states in the preface of this volume that he has made an attempt to present a comprehensive view of the subject of geodesy in its widest sense in order to provide students and others with such information as may lead