

4.2° C. (7.6° F.); in the next twenty-four hours it fell 1.4° (2.5° F.), and then fell 3.2° (5.8° F.), or a fall of 8.3° F. in forty-eight hours. It seems to me that no more positive disproof of Dr. Hann's position could be found than these very observations which have given rise to so much discussion. Here is the temperature higher in the centre of a storm than before and after it, both at base and summit, exactly in accordance with theory, and directly opposed to Dr. Hann's position.

Dr. Hann has tried to fortify his position by stating the fact that in this storm the average temperature was 4° C. below the thirty-years' normal, and this temperature was lower than that in a high, nearly two months later. As I showed in this journal for June 6, 1890, "the temperature in a vertical direction in a storm is not fixed, but may be ten degrees, or even more, lower than the average, and yet be many degrees above that of the surrounding region. That the temperature in an October storm was lower than in a November high area is not in any wise remarkable." This position is exactly the one taken more recently by Professor Ferrel (*Science*, Dec. 19); so that we see that on all accounts Dr. Hann's position is entirely untenable, and his disproof of the condensation theory, if it amounts to any thing, is a direct proof in its favor, as shown by the records.

H. A. HAZEN.

Washington, Jan. 7.

### The Practicability of transporting the Negro back to Africa.

A LITTLE more than a year ago there appeared in the columns of *The Open Court* of Chicago some very excellent articles upon the question as to the methods we should adopt in handling our African population in the future. There were two sides taken in the premises,—those in favor of making the attempt to assimilate this mighty host of millions of negroes we now have in our midst; and those in favor of sending him back to the land of his ancestors. In the opinion of the present writer, the most able of all these articles came from the pen of Professor Cope, and in the main we completely coincide with the views that that far-seeing thinker puts forth.

Professor Cope's reasons for returning the African to Africa are most cogent indeed, and are stated in a philosophic and masterly manner. He lifts himself far above the state of the case as seen by the short-sighted party politician, or the sentimental hopes of the idealist or philanthropist, and, calling history and science to his aid, shows most conclusively that we incur a great danger in quietly submitting to the continued presence of this race of people among us. It is not my object here to enlarge upon his ably stated argument, for he has shown with marked precision and strength the dangers of hybridization of the white and black races in this country, and the constantly disturbing element the negro is in our national organization. By far the greatest danger, however, comes from the mixture of the two races; and that such is now going on, one has to but study the population of a city like Washington to appreciate.

It is to be most devoutly hoped that in the very near future the pressing necessity of taking early action in this matter will be fully recognized; and, when such comes to be the case, the practical question will surely arise as to the best ways and means of accomplishing the transfer. Little has been written upon this point as yet, though we all know that the proper exercise of ability, of energy, and the use of sufficient money, will effect it. It seems to me that the first steps that should be taken are those of an organization of an extensive American expedition to Africa, to primarily report upon the best available areas for colonization, taking conditions of climate and for future improvement into consideration. Such an expedition would have many decided advantages; for, in addition to making a well-organized initial move for the removal of the negro to his proper home, it would give America an opportunity to reap the national benefits that flow from such exploration,—credit of a nature that we now stand greatly in need of, as our last African expedition was practically a puerile failure. Finally, it would give scientific employment to several of the huge and expensive battle-ships we are now constructing, and for which there is no other especial employment in these days of peace, beyond an exhibition of power.

The next step should be in the direction of constructing a sufficient number of comfortable and commodious steamers by means of which the transfer could be made; and upon their completion, the necessary national legislation should be promptly enacted that would efficiently result in the removal of every negro in this country to those parts of the African continent selected for them. The settlement for such personal properties as the comparatively few negroes could justly lay claim to in the United States could be easily settled. It would not create a circumstance aside similar financial problems that we have most promptly and satisfactorily solved in former times.

We do not need the negro vote; we do not need his labor; and, least of all, do we need the injection of his lowly blood into our veins. On the other hand, "Darkest Africa" can well stand, and with the greatest benefit, the introduction into her fertile valleys and upon her fair hillsides, of the very material she most requires to inaugurate her development; that is, several millions of the descendants of her people, which, for a century and a half, have enjoyed the tuition of the most highly civilized race upon the face of the globe.

R. W. SHUFELDT.

Takoma, D.C., Jan. 2.

["Letters to Editor" continued on p. 50.]

### NOTES AND NEWS.

AN exhibition at Grolier Club, 29 East 32d Street, New York, of books on alchemy and early chemistry belonging to Dr. H. C. Bolton, is announced to close Monday, Jan. 26; open afternoons from two to six o'clock.

—Dr. Don José Nicolas Gutierrez, founder of the Cuban Academy of Medical, Physical, and Natural Sciences at Havana, died Dec. 31, 1890, at the age of ninety. The rector of the university, and Professor Poey of the same, still live,—one at the age of ninety, the other ninety-one.

—Owing to their greatly increased trade in New York, George L. English & Co., mineralogists, have leased rooms at 733 and 735 Broadway (within three doors of their former location), in which they have more space than heretofore in their Philadelphia and New York stores combined. The consolidation of the two stores, and the formal transfer of the business, were made on Jan. 1. Mr. Niven, a member of the firm, started Dec. 13 on another collecting-trip to the South-west and Mexico.

—The question has been asked, "Does the weather of Kansas divide itself into seven-year wet and dry periods?" Another question that has been asked, and it is an important one too, is, "Is the rainfall of Kansas increasing?" And it is the object of a paper by E. C. Murphy, C.E., Kansas University, Lawrence, Kan., to answer these questions as correctly as the rainfall records of the State will permit, in which he concludes from the record of the observations thus far taken, that the law of seven-year wet and dry periods does hold in Kansas, and also that the rainfall is steadily increasing in Kansas.

—The next meeting of the American Branch of the Society for Psychical Research will be held at the Association Hall, corner of Berkeley and Boylston Streets, Boston, Mass., on Tuesday, Jan. 27, at 8 P.M. The following papers will be read: "Report of Some Recent Experiments in Automatic Writing," by T. Barkworth, to be read by the secretary; "Report of Some Sitzings with Mrs. Piper in America," by R. Hodgson. No admittance except by ticket. Extra tickets may be obtained by members or associates on application to the secretary, Richard Hodgson, 5 Boylston Place, Boston, Mass.

—Staff-Commander J. G. Boulton, R.N., who has, since the autumn of 1883, been engaged in a hydrographic survey of the Georgian Bay, during the past season completed a large proportion of the work yet remaining to be done, being that part of the east coast from Indian Islands to Moose Deer Point, and including the important harbor and approaches of Parry Sound. The part not yet completed comprises the south-east extremity of the bay, lying south-eastward of a line joining Moose Deer Point and Point Rich, of which the most important portion is Matchedash Bay. Two charts have just been issued by the British Admiralty, covering the work done by Capt. Boulton in 1889. One of these embraces