

face and hands; I moaned all the time I was doing this; they all thought I knew what I was doing. I walked out towards the hack, but told them I preferred to wait till the crowd got out of the way. On the way home my daughter got into the hack, and I told her not to worry, that I was all right. I walked from the hack into the house. The doctor asked me to sit down, but I said I did not dare to, for I should lose control of myself. I asked to have a pin taken out of my dress. They gave me some whiskey. Then I suggested if it would not be a good idea to take a hot bath. My daughter asked me where the arnica was, and I told her in the office on second shelf, which was correct. Then they gave me the hot bath, and while the servant was pouring some water on my head I came to myself for the first time since calling to the man to get out of the way, but only for a few seconds, hearing only voices and feeling something strike my head, giving pain. I was then taken out of the bath and put into bed; I told them how to unfold the bed; then the doctor put a saturated cloth on the wounded part of my head; I told them to get towels and put them on the pillow to prevent soiling it. Then I began to be very delirious [patient now passes from hypnotic into a delirious state], and talked incessantly about a railroad accident; my husband is constantly on the road and I have worried sometimes about it. I repeated the same things over, saying the railroad switch was wrong, etc. This delirium lasted about an hour. The surgeon arrived, and on putting his finger between the scalp and skull I felt a flash of lightning and saw it. I said 'I cannot stand this pain,' and then I became conscious for the first time of the injury on the back of my head. I was in agony, I could feel distinctly a grating when his finger was put under the scalp, and on pressure in one spot there was a bubbling sensation, that seemed to shoot right over the brain. During this time I was conscious, but did not see anything. It is three weeks since the accident occurred, and I have had headache continually, being a re-echo of the old pain. When I try to read, the right eye sees double; my head feels double; the wounded side feels thick; I have had very unpleasant dreams since."

According to the description of the surgeon, the wound was on the right parietal protuberance over the third descending convolution; it was a contusion.

Inquiries of those who saw the accident and subsequent events confirm the statement of the patient. When picked up her eyes were closed; then water was poured on her head, and she opened her eyes; she could not quite remember her husband's name; then she said she felt better and went and washed her face, etc., as already described.

It is interesting to note the states of consciousness: first, unconsciousness at time of accident; then, water being poured on her head, patient passes into the hypnotic state; this lasts nearly an hour, during which she so conducts herself that her friends do not suspect but that she is herself. During this hypnotic state suggestibility may be said to have been normal, since she responded to every one naturally. Her normal self seemed to control her hypnotic self fully; this latter self was the only one during the hour which was conscious.

ARTHUR MACDONALD.

Georgetown Medical School, Washington, D.C.

Cold Waves.

In the December number of the *American Meteorological Journal* Dr. A. Woeikof has presented a paper on cold waves, in which he attacks with some force views which have been expressed by Professor Russel. The belief that a cold wave is due to the passage of a mass of cold air, which has a vertical diminution in temperature of 1° in 180 feet, at twenty or more miles per hour, over the earth's surface heated sometimes 30° or 40° above the air in contact with it, for a distance of 2,000 miles, without accretion or reinforcement, is certainly unique. It is certain that Dr. Woeikof will not recognize this as his view. He will say that the cold will be added to by radiation from the sod or soil, all the more intense because of the clear, dry air of the cold wave. When we think, however, that, as the cold wave advances at great velocity, the earth's surface is frequently 40° warmer than the

air immediately in contact with it, it is difficult to see how the earth's surface can do aught except warm up the air. It seems an inevitable conclusion that a mass of cold air, passing in any direction over the earth, which is itself heated many degrees above the air, must inevitably lose its characteristics in a very short time.

If Dr. Woeikof could study only a very few of our cold waves he would very quickly change his belief. He is at a great disadvantage in that he resides in a country where they have no cold waves, properly speaking. It is well known that in Europe the high areas remain nearly stationary for weeks at a time, and as a result a very abnormal condition of temperature supervenes. The sun shining upon stagnant air heats it up, and this effect becomes cumulative, a little more heat being added each day; besides this, the earth's surface, in this stagnant air, cools down by radiation, as a consequence it frequently happens that the earth's surface is cooler than the air at 10,000 feet; and this has given rise to the most extraordinary theory and one that directly contradicts all known orthodox hypotheses, namely, that in our high areas the air is abnormally heated, while in our storms it is abnormally cooled. It is evident that no discussion of cold waves can be intelligently carried on under such conditions. Dr. Woeikof also suggests that observations at Pike's Peak might be of assistance in studying these phenomena, but this cannot be done at that point for this reason. Pike's Peak is situated on the edge of a plateau about 4,000 feet above sea-level and abnormally heated; also, on the east, there is a marked falling off of the plateau. In consequence, the summit sometimes has the temperature of the plateau and sometimes that of the eastern plain. No cold waves pass over the summit, for the reason that the mountains form a barrier. Most of the cold waves pass down from Manitoba or Assinibioia far to the east or north-east of the mountain.

It would appear that one or two considerations which have an important bearing on this question have been overlooked. For example, it is not proper to think of a cold wave as a mass of cold air having a uniform velocity throughout its height. It is well known that, owing to friction with the earth's surface and other obstructions, the velocity of the air at the earth is much less than at 6,000 feet. It is probable that on Mt. Washington, during the passage of a cold wave, the velocity of the wind is double that at the base. We may consider that the velocity increases uniformly up to this height, or at 3,000 feet it would be about midway between that at the earth and that at the summit. The consequence of this is readily seen. A point in a layer of air at the earth, moving 20 miles an hour, in 10 hours would be 200 miles from its starting-place, but at 6,000 feet a point in the layer would be 400 miles from its first position. If we suppose the temperature diminution in height is 1° in 180 feet at the beginning, and the horizontal temperature difference at the same time is 40° in 200 miles, then, at the end of 10 hours, the vertical diminution in height would become about 1° in 90 feet. The temperature distribution in the latter case would cause a serious disturbance in the equilibrium, according to orthodox views, and there would be an upsetting of the layers, and, in consequence, the cold of the upper layers would ultimately reach the earth. Of course in nature there are no such violent changes, except rarely in summer time, but such an interchange must take place by degrees.

The observations at Mt. Washington abundantly bear out this view. These have been recently published by the Weather Bureau in curves for January, February, and March ("Monthly Weather Review," July to Oct., 1891). On examining the curves we find that in front of a cold wave the diminution of temperature with height is much increased, frequently to more than double the normal, while after the cold wave the temperature is frequently lower at the base than at the summit. In other words, the cold wave reaches the summit 5 to 8 hours before it does the base, and the warming up also lags behind, at the base, the same length of time. A neglect of this consideration lies at the bottom of many of Dr. Hann's vagaries regarding temperature distribution in cyclones and anticyclones. Now, if a cold wave is composed of layers of air moving at different velocities as we recede from the earth, it is easy to see that the velocity of the air at the earth need not be that of the cold wave, for the upper layers of

air would flow over the lower, bearing along the cold wave, and this cold air would gradually work its way down to the earth.

Until we can obtain observations in free air we must be content with hypotheses and careful study of mountain observations. While no present hypothesis will prove satisfactory in all its details, owing to our ignorance of upper air conditions, yet we can rest assured that the view at the opening of this discussion can by no possibility be correct.

E. N.

BOOK-REVIEWS.

The Philosophical Review, Vol. I., No. 1. Edited by J. G. SCHURMAN. January, 1892. Boston, Ginn & Co.

THE establishment in this country of a review devoted to pure philosophy is a noteworthy event, and may prove an event of real importance. The *Review*, we are informed, is to receive "support from private endowments, so that its financial basis is sound and durable;" and though the source of this support is not mentioned, it may be inferred from the fact that the copyright is held by the treasurer of Cornell University, the editor being professor of philosophy in the same institution. The mechanical appearance of the *Review* is similar to that of the *Political Science Quarterly*, the present number containing a hundred and twenty-eight pages. It will be published bi-monthly at seventy-five cents a number or three dollars a year. The editor contributes a prefatory note, in which he announces the character and scope of the *Review* and the attitude it proposes to take. "It will aim at the organization, the diffusion and the increase of philosophical knowledge and activity in America," and "will be an organ through which investigators may make known to their fellow-laborers the results of their researches and reflections." The editor takes a rosy view of the prospects of philosophy in America, but the reasons he assigns therefor, except the freedom of American life and thought, do not seem very cogent. It is true that there is now a certain movement of philosophic thought in the country; but it seems to us to be shallow, and no philosopher has yet appeared among us capable of original thought. The *Review*, we are told, "will not be the organ of any institution, or of any sect, or of any interest," but will maintain "impartiality and catholicity of tone and spirit." This is a good rule if well followed; but observation has convinced us that an editor's predilections seldom fail to show themselves in his selection of material. Professor Schurman's views of what is needed in philosophy at the present time seem to us in one respect mistaken. He holds that philosophers ought to devote themselves to the cultivation of special departments, such as logic, psychology, the philosophy of education, etc.; whereas to our mind the crying need of philosophy just now is the relaying of the foundations, and until this is accomplished we see little prospect of fruitful work in any special department.

The leading articles in this issue of the *Review* are three in number, of which the most important is that of Professor Ladd on "Psychology as So-called Natural Science." It is really a critique of Professor James's theory of the nature of psychology and the method of studying it; and the writer has little difficulty in showing that the theory is untenable, and furthermore that Professor James himself is unable to adhere to it with any consistency. Professor John Watson criticises Kant's philosophy from the standpoint of Hegelism, and though his article contains nothing new, it is interesting as renewed evidence that Kant's disciples have become dissatisfied with the outcome of his teaching. Mr. B. I. Gilman contributes the first instalment of a paper "On Some Psychological Aspects of the Chinese Musical System," which shows much curious study, but which seems out of place in a philosophical magazine. Of the book-reviews, which are quite numerous, the ablest is that of Herbert Spencer's "Justice," by the editor of the *Review*, in which he takes essentially the same view of Spencer's doctrines that was taken in these columns when the book was first published. The other reviews are of varying degrees of excellence, some very good and others rather inferior. We must add, too, that some of the books reviewed are not worthy of any notice at all. The concluding portion of the

Review consists of abstracts of articles in various philosophical magazines—a new feature, we believe, in a periodical of this sort, and one likely to be useful. On the whole, the *Philosophical Review* promises fairly well, and we hope it will prove worthy of its mission.

AMONG THE PUBLISHERS.

THE January number of the *Review of Reviews* contains, as its most conspicuous feature, a sketch of the Czar and the Russia of to-day, written particularly for the American edition of the *Review*, by Mr. W. T. Stead, the English editor. The article contains a number of portraits, and—what will be particularly interesting—a map showing the famine districts, and another showing the so-called "Jewish Pale," the district within which the Jews are permitted to live.

—Macmillan & Co. have in press a translation of Kant's "Kritik der Urtheilskraft," by the Rev. J. H. Bernard, fellow and lecturer of Trinity College, Dublin, and joint author with Professor Mahaffy of "Kant's Critical Philosophy for English Readers."

—Ticknor & Co., Boston, announce "The Norman Monuments of Palermo and Environs," by Arne Delhi and G. H. Chamberlin, architects, in four parts, with fifty measured drawings, several cuts in the text, and many photographic views. The edition will be limited and sold by subscription.

—Readers of Carlyle have often inquired whether it was possible to obtain some accurate text of the course of lectures on literature which he delivered in 1838. They will, therefore, be glad to hear that these lectures are now about to be published by Ellis & Elvey of London. The text now to be issued is derived from the report taken at the time by the late T. C. Anstey, two separate transcripts of which have been in the hands of the publishers.

—An account of that mysterious malady, the grip, by Dr. Cyrus Edson, the chief inspector of the New York Health Department, is published in the January number of *Babyhood*. Dr. Edson traces the history of the grip from ancient times to the present day, describes the symptoms and the mode of treatment, and furnishes valuable aids in the direction of prevention. "Crying and its Significance," by Dr. John Dorning, and "Fat and Thin Children," by Dr. W. L. Carr, are articles that will prove interesting to the readers of that monthly nursery guide. Among the numerous other contributions may be mentioned: "Keeping the Baby Warm," "Children's Lies," "Experiences in Feeding," and a full supply of "Nursery Problems."

—The January number of the *Annals of the American Academy of Political and Social Science* contains two papers on municipal government. They are the article on "The Study of Municipal Government," by Frank P. Prichard, and the article on "The Political Organization of a Modern Municipality," by Wm. Draper Lewis. This number also contains a copy of the by-laws of the Philadelphia Municipal League, an organization whose purpose is the divorce of municipal from national politics. Among the other leading articles in this number are "The Basis of the Demand for the Public Regulation of Industries," by W. D. Dabney, "International Arbitration," by Eleanor L. Lord, a strong plea for arbitration as a means of settling international disputes, in place of war. "Jurisprudence in American Universities," by Professor E. W. Huffcutt, a paper of interest to all law students; and "Instruction in French Universities," by Leo S. Rowe. Mr. Rowe has been a student in Paris for the past year, and his paper explains very fully the courses and method of instruction in the colleges of France. A new department has been added to the *Annals*. It is entitled "Discussion," and contains papers written in answer to articles which have appeared in the *Annals*. This number also contains the proceedings of the tenth scientific session of the academy, which was held in Philadelphia in November. In the Department of Personal Notes in the January *Annals*, there are brief biographical sketches of the following workers in the field of political and social science: W. C. Ford of Columbia College; A. C. Miller of Cornell; D. E. Spencer of Harvard; George E.