single fact is sufficient to disprove all these finely spun theories of Dr. Hann. 3d, The evidence of our own storms is absolutely conclusive on this point, and I kindly turn Professor Davis's attention to this. Fortunately we have a mountain in this country which lifts its head sixty-three hundred feet directly into the centre of more than half our storms and a great number of our high areas. We cannot ask for better evidence than Mount Washington furnishes us with so lavish a hand. Observations are given us for eighteen years from this most remarkable vantage-ground, and these give no uncertain sound on this question. When a storm approaches within five hundred or six hundred miles of this almost perpendicular and isolated height, the temperature begins to rise, and, when the centre passes, the average temperature of its central core is more than ten degrees higher than that of the air five hundred miles in advance. As the storm passes off, the temperature rapidly falls, and is fifteen degrees lower five hundred miles after it than at the centre. When a high area passes, the temperature begins falling, and the diminution and subsequent rise follow each other in almost exactly the manner and to the degree of the reverse operation in a storm.

The evidence on this point is absolutely conclusive; and, since the seeming contradiction in the Alps can be easily explained, we see that there is no need of changing theories on this account. It will be understood that the ordinary theories of storm-generation are none the less utterly worthless, even though this supposed proof of their worthlessness is itself worthless. It is highly probable that Dr. Hann has been misinterpreted in this presentation of his views, and no one will be more shocked than he at this outcome. Dr. Hann found in a certain October storm the average temperature nearly eight degrees below the thirty years' normal for the height in consideration, and in this storm the air was colder than in a high area nearly two months later. Surely this proves nothing whatsoever. 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.

Professor Davis makes this remarkable statement: "The cyclonic air does not rise because it is warm, but, according to Dr. Hann, it is lifted in spite of becoming cool." I doubt if there is a sadder example of bowing down to authority than this. Where is the jack-screw by which this air is lifted? If the air becomes cooler than the surrounding air, does not its specific gravity at once cause it to descend? Is the law of gravity so easily overcome, and swept away by a single stroke? If there is some mighty force pressing down the air in our cold waves, and causing it to warm up the lower it gets, why does it not warm up clear down through? Where is this plane of demarcation, and change from a warm region to one just the opposite and bringing us the coldest period of the winter? There are millions who will thank Professor Davis if he will prove to them that they will not need to buy coal next winter, because, by a newly discovered law, our cold waves hereafter are going to be really warm waves, to use an Irishism.

Professor Davis says, further, "In this country, Hazen has drawn attention to the absence of indication of the 'neutral plane,' called for deductively; and for this and other reasons he has discarded pretty much all parts of the cyclonic theory, following Faye more closely than any other." It seems to me this is an exceedingly unfortunate allusion, if the intention is to support Dr. Hann in his views. The only reason why this so-called "neutral plane" was discarded was because in the centre of a storm it was found that the temperature continually rose, the higher up one went. It is easy to see that this condition is absolutely contrary to that presented by Dr. Hann. Faye has not been followed in this country, but his view that there was a downrush in a general storm has been denied. I am sure that no one will be as much pleased at this corroboration of his views by Professor Davis, and this proof of a downrush in a storm carrying in the cooler air of the upper regions, than M. Faye himself. If readers of *Science* are led to the belief that, after all, we know next to nothing of the real cause of a storm, and that the great and crying necessity that is pressing upon the meteorologic world at present is reliable observation in the storm region, it will be a great advance.

H. A. HAZEN.

Washington, D.C., June 2.

The Winnebago County (Iowa) Meteorites.

A FRAGMENT of the 104-pound "meteorite" found in the northern part of Kossuth County has been examined by us, and we are perfectly well satisfied that it is not of meteoric origin at all. In outward appearance it is suspicious at first sight. The color is darker than that of the other pieces. There is no distinct crust, and no metal present. The gravity taken on a piece weighing about half a gram was 2.83, which is nearly a unit lower than that of the well-established specimens. Under the microscope the crushed mineral shows by reflected light a mass of colorless, transparent particles mingled with dark green particles resembling pyroxene. The analyses given below, together with the appearance of the chip furnished us, strongly suggest diorite or some closely allied rock.

Silica	71.63
Oxides of iron and aluminum	14.39
Lime	6.80
Magnesia	—
Soda	5.55
Water	1.63
Total	100.00

Some circumstances connected with the finding of this piece have made us slightly suspicious from the first, and such examination as we have given thus far seems to be conclusive.

JOSEPH TORREY, JR.
ERWIN H. BARBOUR.

Iowa College, Grinnell, Io., May 24.

BOOK-REVIEWS.

The Village Community, with Special Reference to the Origin and Form of its Survivals in Britain. By GEORGE LAURENCE GOMME. New York, Scribner & Welford. 12°. $1.25.

THE special object of this work, which is the latest volume of the Contemporary Science Series, is to present the author's theory as to the origin of British village communities. He rejects the view most commonly held, that they are exclusively Aryan institutions, and particularly repudiates the theory of their Roman origin, and endeavors to show that they date back to prehistoric times, when the British Isles were peopled by Iberians. He admits, of course, that there is no direct evidence to support this view, but attempts to prove it by reference to India, where village communities are known to have existed before the advent of the Aryan conquerors. He adduces a number of facts relating to the British communities in historic times, and shows that they have parallels more or less close in those of India; and from these facts he draws the conclusion that the origin of the two systems must have been similar. "Over and over again," he says, "the certain evidence of these race distinctions which is forthcoming from the unamalgamated elements in Indian villages finds a parallel among the existing archæological and traditional facts of English villages; and my contention is that the parallel must be true all along the line —must therefore tell us of the old race origins of the English village life" (p. 115). The evidence he adduces in support of this view is by no means sufficient to make it an established theory, though it does show that such an origin of the British communities is possible. The subject, as every one who has even a slight knowledge of it knows, is a difficult one, and it will probably be some time before a general agreement is reached in regard to it. But meanwhile it is necessary to consider the question in all its aspects, and for this reason students of the subject will take a good deal of interest in reading Mr. Gomme's work. He marshals a great array of facts in support of his theory, though he acknowledges that some of them admit of other interpretations than those he gives; and both the facts and his reasonings on them will be useful to other investigators.