

(apparent) upper edge of the cloud. The latter moved in an easterly direction, away from the sun, and in four or five minutes the colors had faded away. A few minutes later another patch of the same kind of cloud, also drifting east, occupied about the same position as that taken by the first cloud at the time it became iridescent, and this second cloud, in its turn, showed faint rainbow coloring. This phenomenon was repeated three times, and in no case did the iridescence last more than four or five minutes. The colors were brightest in the second cloud. There were a good many patches of cirro-stratus in different portions of the sky at the time, and several of them showed waves. Light local showers occurred during the evening or night following.

Studies of iridescent clouds have been made in Europe by Ekholm, Schips, Mohn, McConnell, Hildebrandsson, Kassner and others. A useful article in this subject, by Arendt, will be found in *Das Wetter* for 1897, pp. 217-224, and 244-252. In the *Jahrbuch für Photographie und Reproduktionstechnik* for 1900, in a brief article on the same subject, by Kassner, there are some half-tones of iridescent clouds. The views do not, of course, reproduce the colors.

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PHYSICS AND THE STUDY OF MEDICINE.

TO THE EDITOR OF SCIENCE: Dr. Trowbridge, in his paper on 'The Importance of a Laboratory Course in Physics in the Study of Medicine,' SCIENCE, May 30, 1902, mentions the Johns Hopkins as one of the medical schools that do not offer a laboratory course in physics. His statement is correct, but the inference that might be drawn from it, namely, that the Johns Hopkins does not consider such a course an important part of

the preparation for medicine, is entirely incorrect. Those who are familiar with the requirements for medical study in this country are aware, of course, that from its foundation in 1893 the Johns Hopkins has required from each of its entering students certificates not only of a college course in physics, but of a laboratory course as well. If, as frequently happens, the student has not been able to get a laboratory course in the college from which he comes, he is entered as conditioned in laboratory physics and is obliged to absolve this condition during his first medical year by attendance upon a course provided for such cases.

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SHORTER ARTICLES.

ON A METHOD IN HYGROMETRY.

DURING the course of my work on the diffusion of nuclei in hydrocarbon vapors, I noticed that on certain days the experiments were apt to break down; the column of air within the tower-like receiver, instead of showing on exhaustion the sharp plane of demarcation between the nucleated air below and the pure air above, was liable to condense as a whole, almost explosively. This occurred at a definite pressure and after condensation had already begun in the nucleated region. Suspecting that the discrepancy might be due to the hygrometric state of the atmosphere, I made the following tests which bear out this surmise. The first column shows the pressure decrement on exhaustion, the second the effect produced on the nucleated atmospheric air in the dry receiver. In the second and third parts of the table, the results of artificially moistening and of drying the air are at once apparent.

1. Room Air.			2. Same, Dampened.			3. Same, Dried Over CaCl ₂ .		
Pressure Decrement.	Receiver.	Hygrom. State.	Pressure Decrement.	Receiver.	Hygrom. State.	Pressure Decrement.	Receiver.	Hygrom. State.
cm.			cm.			cm.		
10	clear.	—	10	clear.	—	10	clear.	—
12	"	—	11.5	clear?	.40	15	"	—
12.7	"	—						
13.4	"	3.4	12	fog.	.39	17	"	—
14	fog.	3.3	12	"	.39	19	"	.21
14	"	3.3	11.5	clear?	.40	no fog obtainable.		