(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, McConnel, 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 Reproductionstechnik* 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 demarkation 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.		

It seems to me probable that a method of hygrometry is here suggested which is worth a trial and for which suitable apparatus could be easily devised. In other words, artificially nucleated air is suddenly cooled by expansion until a fog just appears. The dew point is computed from the pressure decrement thus determined. If t be the temperature of the air in degrees centigrade and p its pressure, and if the air is cooled from 20° and 76 cm., we write approximately,

$$dt/(t+273)=.29\ dp/p,$$

so that roughly 1 cm. of pressure decrement will correspond to a little more than one degree of temperature decrement in a dew point apparatus and more than 10 or 15 cm. of pressure difference will rarely be required.

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SCLEROTINIA FRUCTIGENA.

Among the many fungi connected with plant diseases, *Monilia fructigena* is one of the most notable. Its life history has been a subject of study by many in this country and in Europe. Woronin has made perhaps the most complete study, and although the ascospore stage was not found, he did not hesitate to place the species of the genus *Sclerotinia*. The apothecia have not been observed, to my knowledge, by any one who has had the subject under investigation, although they have been sought for by many.

This spring, during April and May, I found this stage in considerable abundance in many peach and plum orchards in Maryland. In fact, some specimens were noticed in every orchard examined where brown rot had appeared during the year 1900. The apothecia appear with the flowers of the peach, and arise from the sclerotia in the 'mummy' fruits covered by slightly moist soil, especially where they have not been disturbed for a year. They are from 3 to 12 mm. in diameter and the stipe is long enough to bring the disk just above the ground. The apothecia dry up in a few weeks and are then very difficult to find, although with a careful search they can probably now be discovered in northern peach and plum orchards. A few of the ascospores retain their power of germination up to the present time.

By means of numerous cultures followed out very carefully on agar, bouillon, on sterile dried apple and prune and also on green peaches and plums, I have produced the conidial stage (*Monilia*) from the ascospores. The peach petals are also easily infected with the 'blossom blight' by placing the ascospores in contact with them. It may be that the blighting of peach and plum flowers comes largely from the ascospores.

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QUOTATIONS.

THE HOUSE OF DELEGATES OF THE AMERICAN MEDICAL ASSOCIATION.

The House of Delegates of the American Medical Association was created to be the legislative assembly of the medical profession of the United States. Its first meeting at Saratoga brought out prominently the possibilities for effective work that are inherent in its method of organization. That the work of this body at its first meeting was not perfect need hardly be said, as no new machine ever made its trial trip without developing some friction. However, it can truthfully be said that the House of Delegates at Saratoga so performed its duties as to encourage its friends and as to quiet its critics. One criticism somewhat frequently passed upon it was that its work was not deliberative. Matters were referred to various committees whose report was adopted or rejected with but scant discussion. The reason for this is not far to seek. The men composing the House of Delegates were the same men who for years have been endeavoring to get the old general session to legislate intelligently upon various topics that demanded elucidation at the hands of the representative gathering of American physicians. Their experience with that method had taught every one of them that prolonged discussion meant always defeat or postponement. This lesson could not be readily unlearned, and so they were moved by a somewhat feverish haste to have important matters passed upon before they were killed by tiresome discussion. Be-