states, that no case treated by him has developed into hydrophobia.

At the time of Mr. Dickson's visit to Sedalia, I had the opportunity of seeing the stone for a few minutes, and found it to be a fossil coral of the genus Favosites. It was of rather small size, only about three-fourths of an inch across, and was of hemispherical shape, with one side cut so as to present a smooth surface. The fossil seemed to be silicified, a part of the tubes being filled almost to the ends, and a part open. The tube cavities on the flat surface generally presented open spaces between the diaphragms or tabulae, making the stone more or less cellular or porous. From the slight examination I made of the stone, I judge it to be Favosites gothlandica Lam., if from Scotland; and, if it is American, F. hemisphericus Y. and S.

I have since seen Mr. Girard; and I learn from him, and also from the Sedalia agent of the Adams express company, that the stone was first soaked in sweet milk without having any effect upon the color of the milk. It was then applied to the arm, and adhered so tightly, that, on turning the arm over and shaking it, the stone still clung to it. About three times the stone was taken from the arm and soaked in milk, and it then turned the milk a greenish color. At last the stone would no longer adhere to the wound, and the cure was pronounced complete.

Has any competent person made proper tests of reputed mad stones? Are these persons mistaken about the stone adhering tightly? Would any similar porous stone adhere the same way? Are the persons also mistaken about the change in the color of the milk? In short, will any stone have any effect on virus in a person's blood? F. A. SAMPSON.

Sedalia, Mo., July, 1885.

[We may add as a final query, How did such a superstition arise? — ED.]

The inscription rocks on the island of Monhegan.

During a recent visit to the island of Monhegan, Me., my attention was called by Mr. P. C. Manning of Portland to the so-called inscriptions described and figured by Schoolcraft in his 'Indian tribes,' vol. vi. p. 610. The inscriptions are on a small island, Menana, which is separated from Monhegan island proper by a narrow channel. The principal inscription, that figured by Schoolcraft, is on the nearly vertical face of a small cliff about five feet high, situated a few rods north and east from the fog-signal station. The country rock of both islands is a black or dark-gray rock different from any rock I have seen in Maine except at one other locality. A lithological description of this rock is reserved for the present. It shows great numbers of veins. Part of these veins are of white granite, or sometimes of white quartz; but many are black, like the surrounding rock, and differ from it simply in fineness of grain. When weathered, even the blackest of the rocks become dark gray in color. As the various layers differ so much in granular condition, and somewhat in composition, they naturally weather and fracture very differently. Some of the rock is quite massive, with no regular fracture: other layers fracture quite prismatically, almost like slates. The rocks are everywhere weathered into forms unusually varied, and often fantastic; the veins sometimes weathering faster than the contiguous rock into furrows, at other times into ridges. The joints and veins are often arranged systematically.

When one first sees the inscription rock, he cannot fail to notice that the appearance is as if a tablet had been prepared upon the surface of the rock, not horizontally, but obliquely. There are two parallel furrows about one-half an inch deep, and eight inches apart; and the so-called letters are on this 'tablet.' The tablet has a fine-pitted surface of weathering quite even and flat. The surrounding rock is more coarsely pitted. Examination shows that this apparent tablet is simply the exposed edge of a fine-grained vein which penetrates the coarser-grained rock obliquely. This vein shows both on top of the rock and also on the side. The parallel furrows which enclose the so-called inscription tablet are simply furrows of weathering at the sides of the vein. The supposed letters are composed of straight furrows intersecting each other obliquely, so that most of them are some modification of the letters V and X. A cross-section of these furrows ends in a sharp angle enclosed between curved lines, like the sinus of a crenate leaf. At the base of the furrows I invariably found a crack in the rock, though sometimes not readily without the aid of a magnifier. There are two systems of these joints, — one nearly vertical, the other nearly at right angles to the sides of the vein. Nearly all the furrows forming the supposed inscription belong to these two systems of joints: a few are aberrant, and two are horizontal. Most of the joints are filled with a film of oxide of iron, but the two horizontal joints and two others are open. At the point where the vein obliquely enters the rock, the furrows on the vertical wall are continued without a break around the angle of the rock to the edge of the roof-exposure of the vein. This is plainly caused by the same joint penetrating the vein at both exposures. In general, the exposure of the vein on top of the cliff has been more unevenly eroded, and shows fewer furrows. A small piece has recently been broken from the south-east corner of the inscription tablet; and an iron-filled crack, which is found at the base of a furrow above this fracture, can be seen crossing the fresh surface, though it is faint. The inscription furrows bend downward into the two longitudinal furrows which border the so-called inscription tablet. The surrounding coarse-grained rock shows but few furrows, and they are not so regular in outline as those on the edge of the vein.

It is evident that the 'inscription' is a freak of surface erosion. The furrows are the result of weathering along joints. At the same time they differ from the ordinary weathering of the island in certain details.

A few rods from this inscription is a smaller one, very much like it in form of erosion furrows; and I found a small slab, near the north-east angle of Monhegan island, showing almost identical V and X forms.

Portland, July 27. G. H. STONE.

Recent contributions to the literature of micro-biology.

Two works upon this subject have recently been published. Dr. Friedländer, pathologist to Friedrichshain, has reviewed the French work of Cornil and Babes mercilessly, and with a personal animus not in harmony with scientific accuracy. It will be remembered, that Dr. Babes was the Hungarian authority who bitterly opposed Koch's views of the tubercular bacillus, and sought to substitute in lieu thereof 'Babes' granules.' He was, for a short time, a student in the laboratory of Professor v. Recklenhausen, and then went to Dr. Cornil, in Paris. Later, he came to Prof. Dr. Virchow, in Berlin, where he has remained ever since. He is still a very young man; and while he has not the extended experience in pathological mycology of Friedländer, Koch, or Hirschberg, he has been constant, in season and out of season, in his lab-

oratory investigations, and may justly claim a voice in this special department. It is to be regretted, that Dr. Babes concedes the primary discovery of the specific bacilli of different morbid processes to Babes alone. 'L'un de nous' creeps into the various chapters with a frequency not in harmony with accepted facts. So far as is known to microscopists, Dr. Babes has made *no* original discoveries; and the work is valuable for reference only (and in this particular its worth may not be overestimated), and as a fresh proof of Professor Cornil's facility as a writer. Lustgarten has priority in the discovery of the contagium vivum of syphilis, as well as in the peculiar process of staining. I saw Babes make several ineffectual attempts to carry out Lustgarten's directions, even while his book was going through the press; so that his statements in this connection, as well as those that occur in the discussion of actinomycosis, are purely imaginative. Actinomycoses have been successfully colored by only one man in Berlin, but his name was not Babes. The drawings in some cases are pretty good. The tube-drawings are, however, wretched, and convey an entirely erroneous impression of the growth of bacilli. Cornil's work in the book is without spot or blemish, and it is unfortunate that his duties as minister of public instruction did not allow him to give more attention to the details. Drs. G. Sims Woodhead, and Arthur W. Hare, have brought out a book jointly ('Pathological mycology'). Dr. Woodhead came to Berlin for a few weeks, worked in the laboratories, and then returned to Scotland, and wrote a book. The nature and scientific value of this publication may be estimated from the length of time which was given to the study of micro-biology. The description of methods is entirely out of date. The illustrations are singularly inaccurate, notably No. v., and all of the potato-drawings. No. 22 is not used by Koch at all, and in No. 34 the tubes are not held properly. No. 37, with description, is absolutely wrong. It is evidently a *contaminated*, and not a *pure*, culture. There is no detailed account of *drop* culture or of plate culture, which is the very basis of Koch's method of pure culture. The bacillus of blue milk forms a *brown* tint, and not a '*green*' tint, as the authors claim.

Neither of these works finds great favor among scientific men in Germany, and neither conveys any adequate impression of the exact processes of inquiry necessary to a comprehensive, intelligent survey of micro-biology. Even Koch himself stands but yet upon the threshold, working his way into the clear light of truth through much tribulation and scepticism; and even he would never dare to pronounce with such autocracy upon certain processes, as do those whose enthusiasm leads them to snap judgments after a few weeks of special study.

An interesting matter lately happened in Professor Johnne's laboratory at Dresden. A friend of mine, working up the micro-organisms of different earths, took a specimen from underneath the laboratory window. From this he cultivated some specimens of the bacilli of anthrax. Inquiry showed that formerly this place had been used as a burial spot for sheep dying of anthrax, but that for *ten* years it has not been used for such a purpose. HORATIO R. BIGELOW, M.D.

Bastei, Sächs. Schweiz, July 13.

[Our correspondent makes some strong statements which need modification. The animus of Friedländer's criticism of Cornil and Babes' book (*Fortschritte der medecin*, July 1, 1885) may be easily understood, and loses value by so much. So far as our perusal of 'Les bacteries' has informed us, the 'L'un de nous,' spoken of in our letter, refers purely to *confirmatory* work done by one or the other of the authors, and is not a claim to originality. To our thinking, Lustgarten, being the only one mentioned at all in connection with syphilis in the classification of the schizomycetes, receives all the credit the most grasping could desire: and the fact that Babes failed once or twice to stain the bacilli, proves nothing in regard to his success at other times (as any practical worker knows); nor, so far as we can see, has it any bearing upon his assertions in regard to actinomycosis. In regard to the staining of the fungus of the latter, we would suggest that some others than the one successful worker in Berlin should try washing the sections for a short time in dilute hydrochloric acid, and then stain according to Gram's method. We fancy there will be no difficulty in finding the fungus stained blue, as was demonstrated in Washington last April. Our review (*Science*, July 24) gives our own opinion of the work. Of Sims and Woodhead's 'Pathological mycology,' we have received only the first part as yet; and we have therefore not spoken of it in detail. Bad as our correspondent seems to think it, it promises to be at least the best work upon the subject that has yet appeared in English. — ED.]

'Color associations.'

Another curious phase of color association, besides the interesting one mentioned by Dr. C. S. Minot, is that in connection with names.

I have heard three children of different temperaments in the same family avow an association of colors with names. Strangely enough, they agreed on nearly every example; as, for instance, that Kate was red; Mary, white; Alice, violet; Dick, deep Vandyke brown; William, a watery blue, etc. This seems even more arbitrary and unaccountable than color associations with months; as that might, to some extent, be influenced by the prevailing tints of natural objects at those particular seasons. Thus the tone of sunlight during January, February, and March, determining the color associated, shining white yellow; that of the April sky, when there is otherwise an absence of striking color; the leading hue of Mayflowers; the zenith of verdure in June, — all may assist in forming the color associations. I may add, I know the use of color-symbols for names to exist also in adult minds in a less definite degree (the agreement between different persons also not so unanimous), but quite sufficiently to cause a confusion in recalling names of the 'same color;' as, for example, Martha and Mary Ann, both being classified as 'brownish drab.' I think if this connection of ideas were traced to the root, it would result in the conclusion that the assortment is conducted on a very elementary basis; as in the case of the two last-mentioned names, usually belonging to persons engaged in ordinary work-a-day pursuits, they are represented, or rather produce an identical effect of commonplace neutrality upon the mind, with the tint commonly adapted to serviceable uses. It is probable that thought is much more frequently carried on by hieroglyphics of form and color than by words. In fact, these afford too slow a presentation of ideas, while some faintly defined symbol conveys the effect of whole sentences at an instant. As Ribot explains a certain illusion of memory: 'there is a ground of resemblance quickly perceived between the two impressions, which leads us to identify them.' We confuse similar modifications of the nerve elements as the pictures on two slides passing simultaneously through the magic lantern are combined. K. A. CHIPMAN.

6 Place d'Armes Square, Montreal, Aug. 3.