

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 The description of methods is entirely out of date.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 medicin*, 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 con-

firmatory 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 May-flowers; 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.

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