mathematics in the University of Calcutta, for the purpose of organizing there a new school of higher mathematics. As the duties of the post require his residence in India only from November to March, it has been arranged that he shall retain his professorship in Liverpool University.

MR. HAROLD PEALING, Liverpool, has been appointed lecturer in physics in the South African College, Cape Town.

DR. ALEXANDER TORNQUIST, of Königsberg, has been invited to the chair of geology and paleontology at Leipzig.

PROFESSOR HIS, of Berlin, who was asked to accept the appointment of director of the medical clinic, at Vienna, as successor of Professor von Noorden, has declined.

DISCUSSION AND CORRESPONDENCE

A PECULIAR DERMAL ELEMENT IN CHIMÆROID FISHES

WHEN recently in Washington, I was kindly allowed by Dr. Hugh M. Smith to examine the type of *Chimæra deani* Smith and Radcliffe (Philippine Islands), to see if I could discover any scale-like dermal structures hitherto unreported. Gently scraping the side of the animal, I readily procured a number of small scale-like objects, which when mounted and examined with a microscope were seen to be strongly curved rods, taking very nearly the form of a horseshoe, or of oval rings with the lower end cut off. They measured about 640 microns in one direction and 500 across, with the free ends somewhat tapering. Frequently several were attached together in a series, the top of each about 130 microns above the top of the one following. Being much interested in these peculiar structures, I asked Dr. Smith to send me material of other chimæroids, and this he very kindly did. In a young *Hydrolagus colliei* (Bennett), 5 inches long, I found the structures *in situ*. A mucus canal about 2,180 microns below the dorsal denticles was lined with these horseshoe-like structures, placed obliquely a short distance apart, so that each one partly overlapped two others, as seen from above. The free ends project along the margins of the canal, which is widely open above, and the structures obviously serve to keep the canal in shape and open.

In the works of Garman, Dean, Bridge, Jordan, etc., I find no mention of these structures; but they may have been recorded in some work not accessible to me in Colorado.

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LABELING MICROSCOPIC SLIDES

TO THE EDITOR OF SCIENCE: I was interested in the note published in SCIENCE, by Zea Northrup, in the July 25 issue, on "A New Method for Labeling Microscopic Slides," for I have been following that method for the last five years. I have found it a very successful way in which to obtain a permanent, clear designation for the slides. It is especially valuable in labeling serial sections, for, as soon as the ribbon has been firmly attached to the slides, the glass near the end of the ribbon is easily cleaned and the label then passes through the remaining parts of the process, until finally it is covered with the balsam and cover glass. This gives complete permanency to the writing and only the destruction of the slide will result in the loss of the label. In this connection it may be interesting to some to speak of two features of numbering slides which, though probably not used exclusively by the writer, he has never seen adopted by other workers. In numbering a long series of slides which contain consecutive sections from one imbedded object it is convenient to assign a decimal number to the individual slides. The practise of the writer has been to assign a whole number to the entire embedding of a certain object preceded by the last two figures of the year number; thus if a certain flower bud is the second piece of imbedding which I have done this year the number of that flower bud is 132. Then the first slide cut from that imbedding is 132.1, or the fifteenth slide is 132.15. It may also occur that more than one piece of an object is included under the serial number 132, in which case the slide number for the fifteenth

slide would be 132.1.15 if it is made from the first cutting. This method at a glance tells in what year the imbedding is done and whether or not all of the slides on a given subject are from one piece of material or from several, so that no doubt can exist as to the history of any particular slide. Of course the figure or figures following the first two and preceding the first decimal point identify completely the subject which that slide is connected with. Incidentally this method of numbering saves the instructor's time, in case the slides are for classroom use, and enables him to assign one or more of the slides to definite students with assurance that the correct slides will be returned.

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Upon the Distribution of Rhodochytrium

During the last three or four years there has been a considerable amount of discussion as to the distribution of *Rhodochytrium spilanthidis* Lagerh. and some remarks have been made suggesting that it was rather curious that it should occur in three widely separated regions and upon three different hosts. The three regions are Ecuador, Kansas and North Carolina. In the North Carolina region upon one of its hosts, *Ambrosia artemisiæfolia* L., it was found covering a considerable area, in fact it extended pretty well from one end of the state to the other. It has since been found to cover a portion of South Carolina extending almost from the mountains to the coast.

The occurrence of the parasite at all points in South Carolina wherever I have made careful search for it has led me to believe that the distribution might be extended to cover most of the southeastern and gulf states and so up the Mississippi Valley and west to Kansas, thus connecting two of these widely separated regions. With this view in mind I wrote to a number of botanists and plant pathologists in the agricultural colleges and experiment stations of the various states covering this territory to ascertain if the parasite occurred in their respective localities. With one exception I received the reply, that so far as they were able to find, it did not occur in any of these localities.

Dr. F. A. Wolf, of Auburn, Ala., sent me specimens collected at Auburn and wrote that he had also found it at Cullman, Ala. The occurrence of the parasite in these two localities makes it very probable that it will be found in the intervening state of Georgia.

Through the kindness of Mr. A. B. Massey I received specimens from Oriole, Md., which is the most northern station for this disease, so far reported, east of the Blue Ridge and Allegheny Mountains. I believe that it may be found still further north if careful search be made for it. It seems to me that there can be no doubt of its being found in Virginia, thus connecting the Maryland and the North Carolina regions.

It is a universal fact that in looking for the parasite I have always found it upon the smooth form of *Ambrosia,* for in both North Carolina and South Carolina there is a smooth and a pubescent form of the host. It also occurs more abundantly where the soil is rather poor and sandy and has not been cultivated for at least one season previous to the occurrence of the parasite.

I also believe that a more continued search for the *Rhodochytrium* will lead to its being found so as to connect at least two of the regions reported, and it is quite possible that it may connect all three of them.

I give with this, localities additional to those already published by Dr. Geo. F. Atkinson[1] where the parasite has been found. The first three are credited to the proper persons reporting them and the rest are those in which I have collected the plant. Oriole, Maryland, Mr. A. B. Massey; Auburn, Alabama, Dr. F. A. Wolf; Cullman, Alabama, Dr. F. A. Wolf; Clemson College, S. C.; Greenville, S. C.; Ridgeland, S. C.; St. George, S. C.; Olar, S. C.; Springfield, S. C.; St. Matthews, S. C.; Yemassee, S. C.; Ninety-six, S. C.; Pendleton, S. C.; Newberry, S. C.; Central, S. C.

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[1] Science, 28, pp. 691–692, November 13, 1908.