

# THE AMERICAN GEOLOGIST.

The only exclusively geological journal in America.

Terms, \$3.50 per year.

Single numbers, 35 cents.

## EDITORS AND PROPRIETORS.

SAMUEL CALVIN, Iowa City, Iowa.  
EDWARD W. CLAYPOLE, Akron, Ohio.  
JOHN EYERMAN, Easton, Pa.

PERSIFOR FRAZER, Philadelphia, Pa.  
ROBERT HAY, Junction City, Kan.  
CLARENCE L. HERRICK, Cincinnati, O.

ARTHUR LAKES, Golden, Colo.  
ANDREW C. LAWSON, Ottawa, Ont.  
EDWARD O. ULRICH, Newport, Ky.

ISRAEL C. WHITE, Morgantown, W. Va.  
ALEXANDER WINCHELL, Ann Arbor, Mich.  
NEWTON H. WINCHELL, Minneapolis, Minn.

Newport Ky. Nov. 18<sup>th</sup> 1890

Sir William Dawson  
McGill College  
Montreal Canada

Dear Sir:

Your letter of a month ago remained unanswered because of my absence from home. I have been engaged in field work in a region where the mail service is not very good. For that reason my correspondents have had their patience tried rather severely this year.

I am not certain that I recognize your sponge. At any rate it is not one of those worked up by me for Illinois rept. I am expecting copies of vol. 8 every day. The volume has been printed for over a year and its appearance or distribution is delayed because of a lack of funds to bind it! I think it a shame to delay a publication for such a trivial cause.

Perhaps I may be able to offer a suggestion that will throw a little light on your fossil. But it would be much more satisfactory if I could see a specimen.

The radiate structure brings to mind a number of forms,

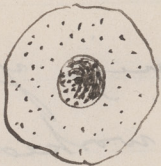
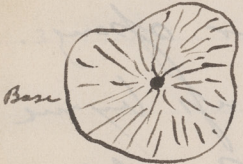
but your description of the section makes me think that it might be a simple form of Dystactospongia (S.A. Miller) D. insolens and another form (undes.) has radiate oscula irregularly distributed, and I regard the genus as one of a group of Calcareous sponges, to which my Heterospongia, Saccospongia, & Strotospongia also belong. In D. insolens these oscula are distributed about as in this sketch:



The masses are made up of tortuous and freely intercommunicating canals. The spicules rarely show in thin sections, the change of the caliche to the crystalline form having in nearly every case completely destroyed the individuality of the spicules.

Bolbopontis is indeed a mysterious organism. I have several theories on it, but cannot pursue them because I have not enough material. If your sponge is anything like those bodies, then I fear my suggestion that its affinities may lie with Dystactospongia is widely off. In that case I would like in quite a different direction.

I have had under consideration, for a number of years, certain peculiar bodies, mostly discoidal and attached basally, which if they had not that peculiar "crinoidal fracture", I would say were unquestionable sponges. I have these bodies from the Cincinnati rocks and another of precisely the same type from the Corniferous of Ohio. If you are interested in them I will write you further on them and one other problematic organism that appears to be related to them.



Very truly yours

C. D. Walcott

March 1908