

Coondale Road

Croydon

July 26. 88

Dear Sir J. W. Dawson,

I am still working at  
Archaeocyathus, but not suf-  
ficiently advanced to be able  
to state definitely the results  
of my study. The Canadian  
Survey sent me an instrum-  
two series of specimens but  
they did not send the sections  
which Mr. Billings studied  
and they state that owing to

Mr Weston's absence in the  
North West they are unable to  
obtain them until he returns!  
This I much regret as I now  
particularly require the sec-  
tions of A. Minganensis, as  
I cannot make out from the  
specimens the inner wall in  
this form as figured by Billings.

Prof F. Roemer has sent  
me the type of his A. Marianus  
and Bornemann has given  
me a fragment of the Sardinian  
rock filled with Archæonys  
this structure, from which

I am now making numerous  
pie sections. These Spanish  
and Sardinian forms cor-  
respond very closely with  
A. profundus and A. Atlanticus  
and from the Canadian Pots-  
dam and no doubt they are  
closely allied.

But A. Minganensis is,  
so far as my investigations ex-  
tend, altogether different. It  
seems to be a siliceous sponge  
and I have been wrong in  
my guess as to the spicules  
of the wall being only a replaw.

ment of a calcareous outer  
membrane. I believe they are  
really spicules and of a lithio-  
lid type. The other spicules referred  
to in my note in the Geol. Mag.  
are I still think adventitious  
to the sponge.

I feel a difficulty about  
what should be accepted  
as the type of Billings' genus  
Archocyathus. The A. atlanticus  
cus was first published &  
figured as the type; in the  
Pal. Trans. p. 3, the A. profundus  
is placed first & figured and

Mr Billings appears to sub-  
ordinate the Atlantius to a  
second place; and at the  
end of the volume, the A.  
minganensis is figured as  
the principal species. There  
is a doubt whether the A.  
profundus and A. atlantius  
can be included generically  
together. Walcott makes  
them distinct but I do  
not yet know if this view  
can be maintained. It is

however very certain  
that the A. Minganensis  
will have to be made into  
a distinct genus.

With kind regards

Believe me

Yours very truly

George J. Kille

Trade  
Chy/88