Geological Survey Office.

156 The Terrace, Wellington, N.Z., July 24th, 1939.

Dr. J. A. Cushman,
SHARON, MASS., U.S.A.

Dear Dr. Cushman,

I wrote to you regarding New Zealand foraminifera on March 4th, 1937, and received your reply of May 12th. You will perhaps have wondered why you have heard nothing from me since then, especially as I asked for your assistance in many directions, and promised to send you material from here. Shortly after that date considerable changes occurred in my surroundings and I am now Micropaleontologist to the N.Z. Geological Survey. As this position was not previously extant here I have had a very busy time getting things in order and coping with collections sent in. Part time work for the Vacuum and Shell Companies now prospecting here has also added to my duties.

In view of this lapse of time it seemed best not to write again until I had something definite to send. I mentioned in my previous letter the hope of beginning publication, but this has only now materialised, and I am enclosing for your acceptance the first of what I hope will be a series of papers at regular intervals. Work on all our faunas is now under way here and I have much material described in manuscript - another paper will be out very shortly, while I have just finished preparing a third. Should any New Zealand material from other sources come into your hands, or reach others you know, it would be advisable therefore to get in touch with me about it, for much work has now been done on our forams.

You will notice in the introduction that I have promised to forward authentic examples of all species discussed to you, so that you can understand what is going on here, keep in touch with me about the work and offer any critical advice. Needless to say, I would be glad of the latter at any time, and will also attend to any requests from you for other or further material illustrating our faunas. I should be very glad of the named slides you mention in your own letter, whenever you have the spare time to send some. As regards American and other faunas that have been illustrated in the "Contributions of the Cushman Laboratory", it would be sufficient if you could send me a tube of washed material, which would spare you the time of picking out and identifying. For the European species of d'Urbigny, Reuss, etc. I would be glad of named examples. Do not hesitate to ask for anything from New Zealand; it is of more immediate moment that a reference collection should be made available to you, so that I can benefit by your experience. The only thing I ask is that you discuss with me any matters referring to our faunas that may arise. I am anxious to get things done here in an orderly way and would not like to see somebody in America start to describe N.Z. species under the impression that no one was working on the material here. There is always the possibility now that oil geologists may take home samples and carelessly distribute them, without reference to the work being done; if any such case should come to your ears, I should be grateful if you would make the position known.
September 25, 1939

Dr. H. J. Finlay
Geological Survey Office
186 The Terrace
Wellington, C. l, New Zealand

Dear Doctor Finlay:

This will acknowledge with many thanks the two papers on New Zealand foraminifera and the slide of paratypes and other specimens which you sent me. They will be a very welcome addition to our collection and I know the many persons who will examine them will be glad to be able to see actual paratypes.

We have just returned from a long summer in the White Mountains of New Hampshire where we have a summer home and temporary laboratory. This will explain why I have not acknowledged your very useful contributions.

Just as soon as we are settled and into our routine I will try to send you some material which I think you will be glad to have and also some mounted slides of named species. My assistants will not all be here until about two weeks from now but I am in hopes to send you something within the course of a month or six weeks.

The Foraminidae paper has just been published by the U. S. Geological Survey and I will write them to see if a copy can be sent directly to you. I shall be interested in the publications of the other papers that you mention and will certainly let you know in regard to any work on material regarding New Zealand foraminifera that may come to my attention.

As to the matter that you mention of collaboration and publication of faunas, I am sure that some such arrangement could be made.

With my best wishes,

Sincerely yours,

Jos. A. Cushman

JACfE
May 12, 1937

Mr. H. J. Finlay
29 Pine Hill Terrace
Dunedin, New Zealand

Dear Mr. Finlay:

Just a note to say that absence from travel and pressure of work has put me far behind in answering letters. This will acknowledge your letter of March 4. Last, and I enclose the following:

1. A complete set of volumes 1 to 13, inclusive, of contribution to Molluscan Fauna of New Zealand.

The volumes 11 to 13, part 1 I sent you and the other parts of volume 13 will be sent as issued. Bill for all is enclosed.

I note your wish to exchange material, and I shall be glad to do so. At the first opportunity I will go over separate here and see what I can send you. Some years ago I bought what seems to be type material from Kashi and Motobara from which I found many of Stach's species. Otherwise I have very little of any type material and am glad to exchange it with you. I expect that slides of named species would be very useful for your work. As time permits I will mount some of these from from the localities you suggest on the slides with thirty black squares and give you a typed list of the thirty species, then you could remount them in whatever way you choose.

I am glad you have the literature you list as most of it is now out of print and unobtainable here. The earlier volumes of the Contributions are listed on the sheet sent with them. As the subscriptions do not pay for the cost of publication we have to make a uniform charge for them. Some of the other literature, however, I will send you in a few days and will send you a paper on the Nonionidae to be published this summer by the U.S. Geological Survey.

You may be sure I will try to help you in any way I can.

Sincerely yours,

Jos. A. Cushman
20 Pine Hill Terrace,
DUNEDIN, N.Z.
March 4, 1937.

Dr. J. Cushman,
Director, Cushman Lab. for Foram. Research,
SHARON,
Mass., U.S.A.

Dear Dr. Cushman,

I have intended writing to you for some time past, but have kept putting it off as I am an utter stranger. However, I do not see how to get an introduction, and at the present moment I can get little further with my foram work without your help. I am engaged on some papers for publication, and am so constantly held up for lack of literature here that I am compelled to introduce myself by writing, and ask for advice and assistance.

It will be simplest if I tell you the position I am in regarding forams. In 1933 I began doing research work and publishing papers on New Zealand Tertiary and Recent mollusca, and eventually got my D.Sc. in this connection. In 1933 the Vacuum Oil Co. began a geological investigation of the Poverty Bay district (East coast of the North Island) in search of oil, and the fact that the thick and extensive Tertiary beds there were so often poorly fossiliferous in all but forams was soon noted. Dr. Jablonski inquired for someone in New Zealand or Australia who would act as palaeontologist at Gisborne, their headquarters; I offered and was accepted. At that time I knew nothing whatsoever about forams, and had to pick up knowledge about them as best I could while sorting and identifying (1) macro- and micro-fossils for them, and trying to work out field correlations over a large, very complicated, and disturbed area, with beds ranging in age from Upper Cretaceous to Pliocene.

I should perhaps mention that at an early age I lost the use of both legs, and am thus considerably handicapped in moving about -- field work is possible only from a car.

After some 15 months, work was discontinued, and I returned to Dunedin with the foram collections, buying the Spencer binocular from the Company. Since then I have been working on them, examining and reporting on numerous samples collected by the New Zealand Geological Survey, and generally trying to increase and make commercially and scientifically useful the foram experience and
knowledge I gained. I have now dropped mollusca altogether, and determined to gamble on the forams as a means of earning a livelihood, hoping that further oil investigation will be carried out in New Zealand, and that my services as a micro-palaeontologist will become necessary.

I have purposely written and published nothing as yet on the group, though New Zealand is practically a virgin field, especially as regards the Tertiary. My experience with mollusca has taught me the value of waiting till enough literature has been consulted, and sufficient is known of various faunas, from a geographic, bathymetric, migratory, and evolutionary point of view, so that inaccuracies and synonyms will not be too plentiful. But as I am the only one in New Zealand working on this subject, and am even now in the sole possession of much important stratigraphic and other knowledge concerning it, several scientists have urged that I should commence publication of some of the facts, if only as a basis for interpreting and amplyfying the somewhat vague reports I have to supply on samples received. The correct name for almost any New Zealand species is so hard to determine, and there are probably so many new species, that I can seldom at present back up my age conclusions with satisfactory lists. I have lately been given a very small grant expressly for publication work, so am at last trying to put something in writing, and get illustrations done.

As you can well understand, I am up against the two major lacks of foreign named specimens and literature. As regards the former, I most urgently need Vienna Basin Miocene, Italian Tertiary and Recent, European Cretaceous, and American Cretaceous and Tertiary. Outside of New Zealand, I have fairly adequate shallow water collections from the Indo-Pacific, Australia, British Isles, and West Indies, but practically nothing from any depth except a good series of dredgings from the Hawaiian Islands area, down to 1000 fath. And apart from a few localities in the Australian Tertiary and Cretaceous, and some matrix from French Eocene mollusca from Damery and Grignon, I have no fossil material at all. So that practically any specimens, named or unnamed, or any localised matrix, washed or in natural state, would be of extreme use to me at any time.

But it is literature that handicaps me most. I have access in the libraries here to some of the usual standard works, -- Challenger Expedition, Novara Expedition, Journ.Roy.Micr.Soc., etc., but there are lacking others just as important, -- the later vols. of Proc.U.S.Nat.Mus., all of d'Orbigny, and all Italian and German works. I can borrow the Journal of Pal. from Wellington, but really need it constantly at hand. By far the main want,
of course, is the Contributions to the Cushman Lab. Foram. Research, and I really cannot proceed much further without these volumes. I am accordingly enclosing a money-order to cover my subscription for the current year, and would like you also to send me all back volumes you have available -- I will remit the cost on their arrival. Could you, if possible, send me on those published since your 1933 treatise and key immediately, and the others, if more convenient, later.

Would it be possible to come to some arrangement regarding exchange of New Zealand Tertiary or Recent forams with you for American samples or specimens, or more especially at the moment for literature? Scientists in New Zealand are not well off, and my means at present consist mostly of hope for the future; if you could suggest some way by which the expense of procuring the necessary literature and samples of American matrix might be lightened, I would be grateful.

Of your own publications (including those with collaborators) I have only the following:--

Foraminifera (and Illustrated Key); 1933.


Bulletin 104, " " " (Atlantic); -- except pt. 4 (Lagenidae) which I badly need.

Bulletin 103, " " " (extracts; smaller and larger forams of Canal Zone).

Bulletin 161, " " " (Tropical Pacific); pts. 1 and 2 only.

Bulletin 100, " " " (Philippines).

Carnegie Inst., Wash., Pub. 342 (Samoa). But not the Tortugas, or any other of these publications.

Separates from Proc. U.S. Nat. Mus., as follows:--

Vol. 66, art. 30 (Hantkenina)
Vol. 72, art. 20 (Siphonina)
Vol. 80, art. 3 (Atlantic Coast of S. America)
Vol. 80, art. 14 (Trinidad Upper Cret.)

If you could therefore send me any further papers of your own, or put me in touch with others, or let me know where I could if necessary buy these papers I would be grateful.

As evidence of desire and ability to make good use of any literature or material you can send me, I enclose some of my old papers on mollusca, also a copy of the final reference I had from
Dr. Jablonski. I shall, of course, send you anything I may write on New Zealand forams as soon as published. Perhaps you would pass on the molluscan separates to someone to whom they might be useful when you are finished with them.

Trusting that you will appreciate my difficult position, forgive my writing an introductory letter of such length, and be willing to help the cause of foram investigation in this out-of-the way corner of the world,

I am

Yours sincerely,

(H. J. Finlay).