

Alfred Bader

General Correspondence

1943

QUEEN'S UNIVERSITY ARCHIVES	
LOCATOR	5169
BOX	7
FOLDER	5







# BLACK RIVER PRODUCTIONS LTD.

Box 55, Mabou, N.S., Canada B0X 1X0  
☎ (902) 258-3354 • Fax (902) 258-3244

February 21, 1993

Mr. Alfred Bader  
2961 North Sheppard Ave.  
Milwaukee, Wisconsin  
USA 53211

Dear Mr. Bader:

Thank you for taking the time to speak with me this evening, about my film BOTH SIDES OF THE WIRE, which is based on a book by the same name by TED Jones, about the internment Camp B, that was in New Brunswick in 1940 and 1941. Music is by Leonard Cohen. A description of the film is enclosed.

I have been working on this film for three years and it is now nearing completion. It should see fairly wide distribution on TV, in schools and communities.

I am enclosing a video copy of what is called a "rough cut" for you to view. The film will have some changes to all aspects being picture editing, music and narration before being finished in the laboratory in April, but it is useful to look at in a general fashion.

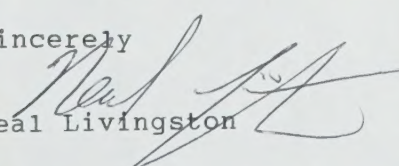
The film BOTH SIDES OF THE WIRE, has a budget of \$305,000 of which I have raised 90% from 7 different Government agencies both Provincial and Federal in Canada. To raise the other 10% we have available Charitable status through VISION TV in Canada, and thus are approaching potential donors to assist us with this.

Unfortunately, after having tried to raise these funds in the Jewish communities in Nova Scotia, and more recently in Montreal without success, for more than a year, I realized that although this film has important significance on a number of levels, it is difficult to raise the \$30,000.00, especially in difficult times.

Thus when I saw the recent article about you, and your relationship to Queen's University, I thought you might wish to look at BOTH SIDES OF THE WIRE, and consider donating to this project. We would of course put a credit on the film to any donor.

I hope you enjoy watching the rough cut, and I look forward to hearing from you, whether you are interested or not in financially assisting the completion of this film.

Sincerely

  
Neal Livingston

5



Play A  
Supporting  
Role

March 1, 1993

Dear Dr. Bader,

I want to apologize for a terrible error over a memo I accidentally enclosed in my recent letter to you. It was a grave mistake which I'm sure caused you anger. I hope you can forgive me. \*

I am new at fund raising on such a large scale. Last fall when we began to review names of prospective donors I asked Charlotte Schield's advice about several names on our solicitation list. My question was whether our solicitation should be made directly to men at their offices or should include their wives. That is how Mrs. Schield's name happened to appear in the memo.

The notations were taken out of context and were meant only for me. I regret the embarrassment this incident has caused you, your wife and Mrs. Schield.

Sincerely,  
Anne Stratton

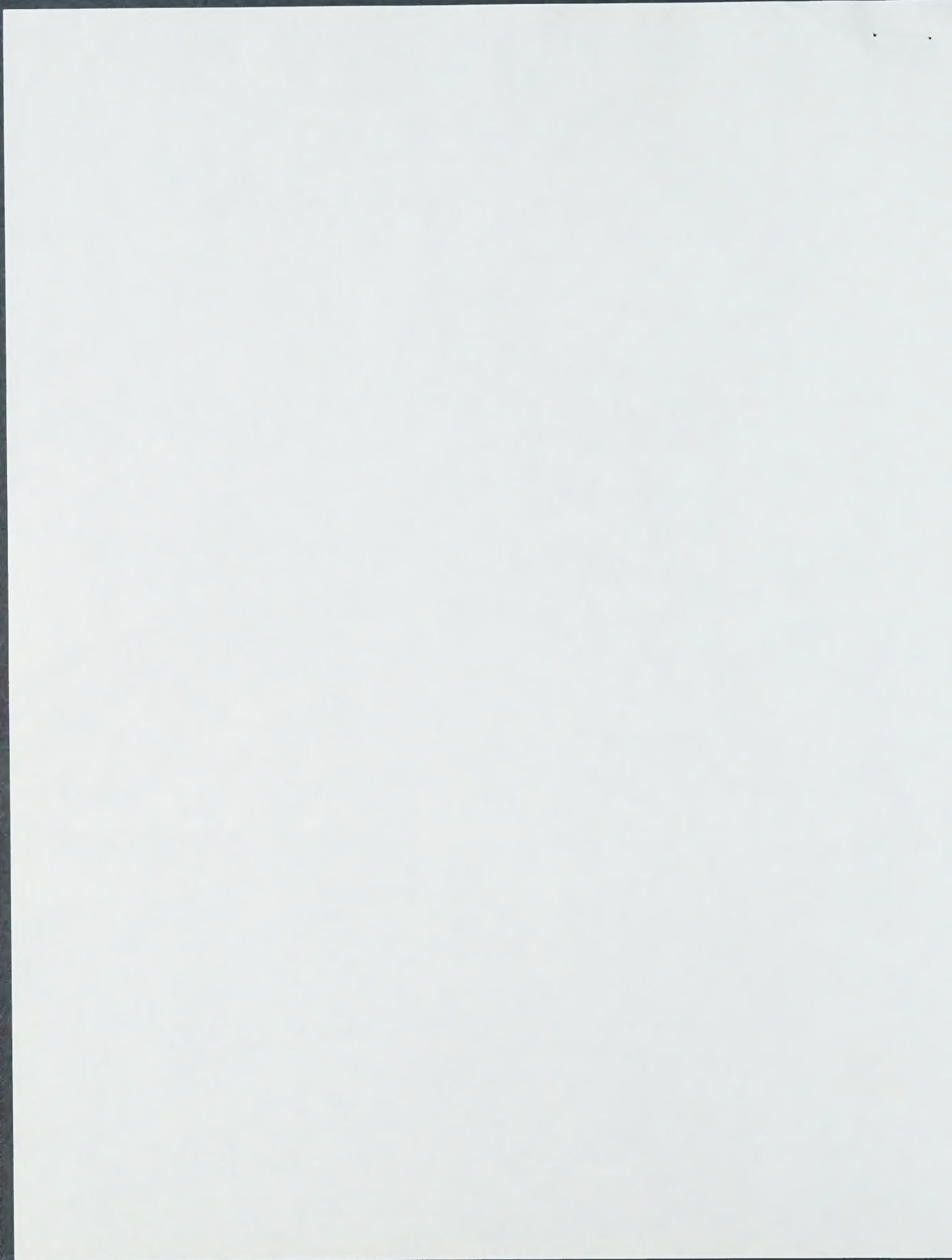
\* Of course.  
Many thanks for  
your notes and best wishes  
Dr. Bader

- President  
Frederick G. Luber
- Executive Director  
Susan G. Dragisc
- Campaign Co-Chairmen  
Richard A. Abdo  
Anne Y. Stratton
- Major Business Gifts  
Robert A. Kahlor
- Workplace Giving  
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Jeffrey P. Schouten  
Susan B. Schouten



THE UNITED PERFORMING ARTS FUND  
929 North Water Street, Milwaukee, WI 53202  
(414) 273-8723 Fax (414) 273-5480







Dr. Alfred Bader  
2961 North Shepard Avenue  
Milwaukee, Wisconsin 53211

March 1, 1993

Mrs. Anne Stratton  
9608 North Juniper Circle  
Mequon, Wisconsin 53092

Dear Mrs. Stratton:

I find your note, copy enclosed, hurtful and untrue.

I do not know whether you are generous, but I would certainly not write that you are not known for your generosity.

If you will check with Bill Schield, he will confirm that he has handled many very substantial gifts for Isabel and me. It is just that we prefer giving substantial gifts to universities, to help disadvantaged students, and to organizations such as the Salvation Army. I have just not been very interested in UPAF and your note isn't going to change that.

Sincerely,

Enclosure  
c: Mr. and Mrs. William Schield  
Mr. Daniel Bader



THE UNIVERSITY OF CHICAGO

1950

1950

1950

1950

1950

1950

1950

1950

1950



**ANNE STRATTON**  
9608 NORTH JUNIPER CIRCLE  
MEQUON, WISCONSIN 53092

February 22, 1993

Dear Dr. and Mrs. Bader,

Last summer, after more than a year of work, the board of directors of UPAF adopted a long-range plan which encompassed a new membership structure. The arts in Milwaukee had outgrown UPAF's historical form. If you compare today's membership with the past you can see what I mean.

Back in 1967 when UPAF was founded there were no professional children's theaters. Today there are two dedicated exclusively to drama for children. In 1967 our ballet, contemporary and ethnic dance groups had barely been formed and there were only a few professional theatrical troupes. As you know today Milwaukee is known for its variety of theaters and dance ensembles which allow artists in our community to make a living without traveling all over the country. Each of our groups has its own unique style and cultural influence. Each has its own audience.

With the new structure in place, new groups can bring their particular talents and their supporters under the UPAF umbrella, broadening not only our artistic reach, but also UPAF's sources of funding.

In 1967 when seven groups banded together, there was no need for an application process to join UPAF. Today we have one. What's more, the new plan offers flexibility for groups to grow or change their status and participation within UPAF.

As our performing arts have grown, improved artistically and achieved success and stability, their need for UPAF support and the support of the corporate and private community has also grown.

Our hope this year is that the community will show us their endorsement of the new plan. To give all three tiers the funds they deserve, to ensure the performing arts continue to thrive, we need the generous support of businesses and industry, of individuals from Kenosha to Kohler, from West Milwaukee to West Bend, from the Lake to the Lake Country. It always comes down to money.

Critical to a successful campaign is commitment. Your past generosity has been appreciated. We hope this year you will consider a gift of \$1750 in support of the groups we all value.

I would enjoy meeting with you and will call you soon to see if that is possible.

Thank you.

*Anne Stratton*

Anne Stratton  
1993 UPAF Campaign Co-Chair



UNITED STATES DEPARTMENT OF JUSTICE  
FEDERAL BUREAU OF INVESTIGATION  
WASHINGTON, D. C. 20535

MEMORANDUM FOR THE DIRECTOR

DATE: 10/15/64  
SUBJECT: [Illegible]

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Bel Canto Chorus • Florentine Opera Company • Milwaukee Ballet Company • Milwaukee Repertory Theater  
Milwaukee Symphony Orchestra • Milwaukee Youth Symphony Orchestra  
Skylight Comic Opera • Associate Members



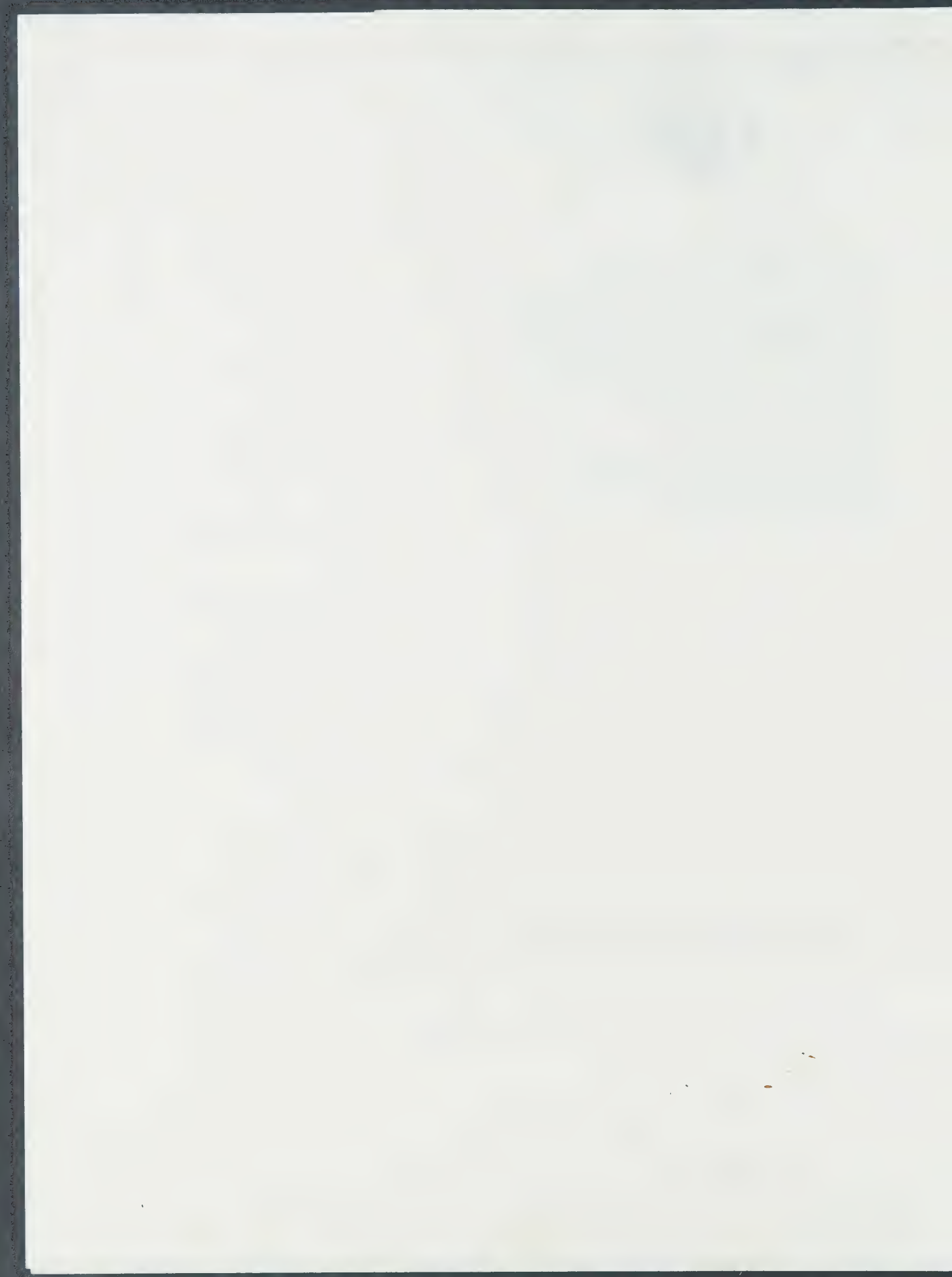
Dr & Mrs. Alfred Bader (Isabelle)

Dr. Bader is a founder of Aldrich Chemical now Sigma Aldrich. His first wife was Helen Bader who founded the Helen Bader Foundation. He has significant means!

Alfred is an art collector and is not known for his generosity.

They contributed \$150 in December, but Charlotte Schield felt that if you met with Isabelle that we might get at least Golden Circle.





Telephone: Brighton (0273)  
602793

4 DITCHLING ROAD  
BRIGHTON, EAST SUSSEX  
BN1 4SF  
ENGLAND

1 March 1993

5.35 → 13.43  
52 16.00

Dear Alfred

How pleasant it was to receive your letter of February 10,  
with the interesting enclosures.

I enclose the clipping from our local newspaper which prompted  
my original letter. There was an element of luck in my seeing  
it at all. The Argus is published in two editions daily, midday  
and evening: fortunately that day I got the midday edition - the  
story was not carried in the later one.

I too eventually reached the dizzy rank of school prefect at  
East Hove - I've still got the badge! No glowing reference  
from the Headmaster, though.

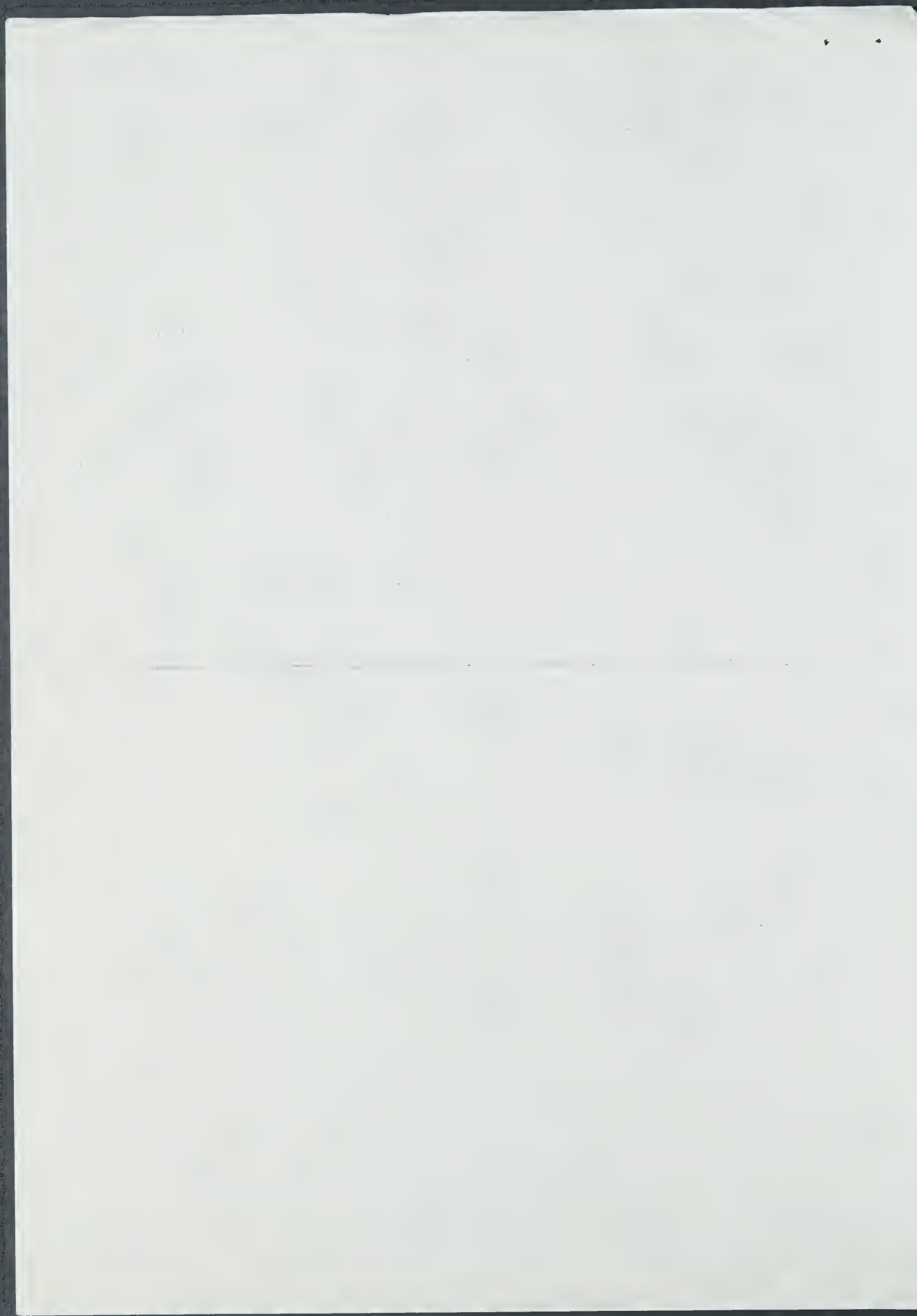
I look forward to receiving a call from you next time you are  
this side of the 'pond', when we can get together to reminisce  
on the old days, and set the world to rights.

Best Wishes

Tony

PS Dear old Dimbles' advice about washing behind the ears was  
largely wasted on me, as my wife will testify. However,  
his periodic tirades against the lewd and 'ungentlemanly'  
practice of putting hands into trouser pockets, did make  
an impression. I've found it beneficial over the years  
when it's been my turn to buy a round of drinks.





Tel: 602793

4 DITCHLING ROAD  
BRIGHTON BN1 4SF  
EAST SUSSEX  
UNITED KINGDOM

12 January 1993

Dear Dr Bader,

Our local newspaper, the "Evening Argus" has just published an article about Herstmonceux Castle. As I read it, bells started ringing, and the accompanying photograph of yourself clinched the matter - I was at school with you in 1939 - East Hove Senior School for Boys, Connaught Road, Hove - Form 4 - Mr. Dimberline form master.

Whether you remember me is another matter! Do you recall a shy, rather withdrawn boy, left-handed, with bright red hair, called Anthony (Tony) ALCE? One of the interests we shared was stamp collecting, and we used to compare and swap specimens in the playground at break-times. I remember you said the star item in your collection was a Canada 1851 12d black, which impressed me enormously! In September 1939, after the arrival of the London evacuees with whom we had to share the school on a rota basis, we were taken for long walks over the Downs, and I distinctly recall walking with you on one of these.

I have searched in vain for a photograph of myself taken around that time, but the only ones I can find show me in my pram, or considerably later, wearing spectacles. Not very helpful!

Returning to the newspaper article, you will be glad to learn that the old school has NOT been demolished, but survives virtually intact (I went there yesterday just to make certain!), These days it is an Adult Education Centre, and the playground where we swapped stamps is now a car park.

Some time after we lost touch in 1940, I visited the little shop of W. Spowart, stamp dealer, of Queen's Road, Brighton, and mentioned your name. Spowart is long gone, so there can be no harm in telling you he told me he had informed the police you were a dangerous enemy alien! This may explain your arrest and internment.

I must take this opportunity to thank you for 'rescuing' Herstmonceux from the hands of the dreaded developers, who would probably have turned it into a supermarket, or worse!.

This letter reaches you through the kind assistance of Dr David Walton of the University of Sussex.

My very best wishes to yourself and your wife.

*Tony Alce*

PS Please excuse typewritten letter- my hand-writing is totally indecipherable - even to me!





ALFRED BADER FINE ARTS

DR. ALFRED BADER

ESTABLISHED 1961

February 10, 1993

Mr. Tony Alce  
4 Ditchling Road  
Brighton, East Sussex BN1 4SF  
England

Dear Tony:

I am just delighted to have your thoughtful letter of January 12th. Of course I remember you, but must confess that I had forgotten your family name.

Some years ago a friend of mine from Chemistry at the University in Falmer accompanied me to look at our old school, and while the building still existed, it had been turned into a school for adult education. Newspapers tend to get things mixed up.

I knew early in May of 1940 that someone had reported me, not for being a dangerous enemy alien, but for dealing in stamps, something I was not supposed to do.

An old lady in Hove paid one guinea a week for my room and board, but being in her eighties did not realize that kids also should have a little pocket money. That I tried to make up for by selling stamps.

The greatest pleasure I had while at the East Hove Senior School for Boys was to become a school prefect; I really must have been a goody-goody little boy as evidenced by the headmaster's recommendation.

The enclosures will tell you a little of what I have been up to.

Isabel and I have a little home in Bexhill where we usually are in May, July, November and December. I will telephone you in May to see if we can get together.

All good wishes,

*By Appointment Only*  
ASTOR HOTEL SUITE 622  
924 EAST JUNEAU AVENUE  
MILWAUKEE WISCONSIN USA 53202  
TEL 414 277-0730 FAX 414 277-0709



ALFRED BADER FINE ARTS

DR. ALFRED BADER

ESTABLISHED 1961

May 7, 1993

Via Fax 765 7645

Mr. George Mort  
M&I Marshall & Ilsley Bank  
770 North Water Street  
Milwaukee, Wisconsin 53201

Dear George:

I will be gone and mainly in Britain and on the continent from May 14th to July 26th.

There is a fair chance that I may need somewhere between £500,000 and £1,000,000 to be put into my personal account [REDACTED] at Close Brothers in London. I will, of course, have ample funds in my personal account at the M&I to cover the purchase.

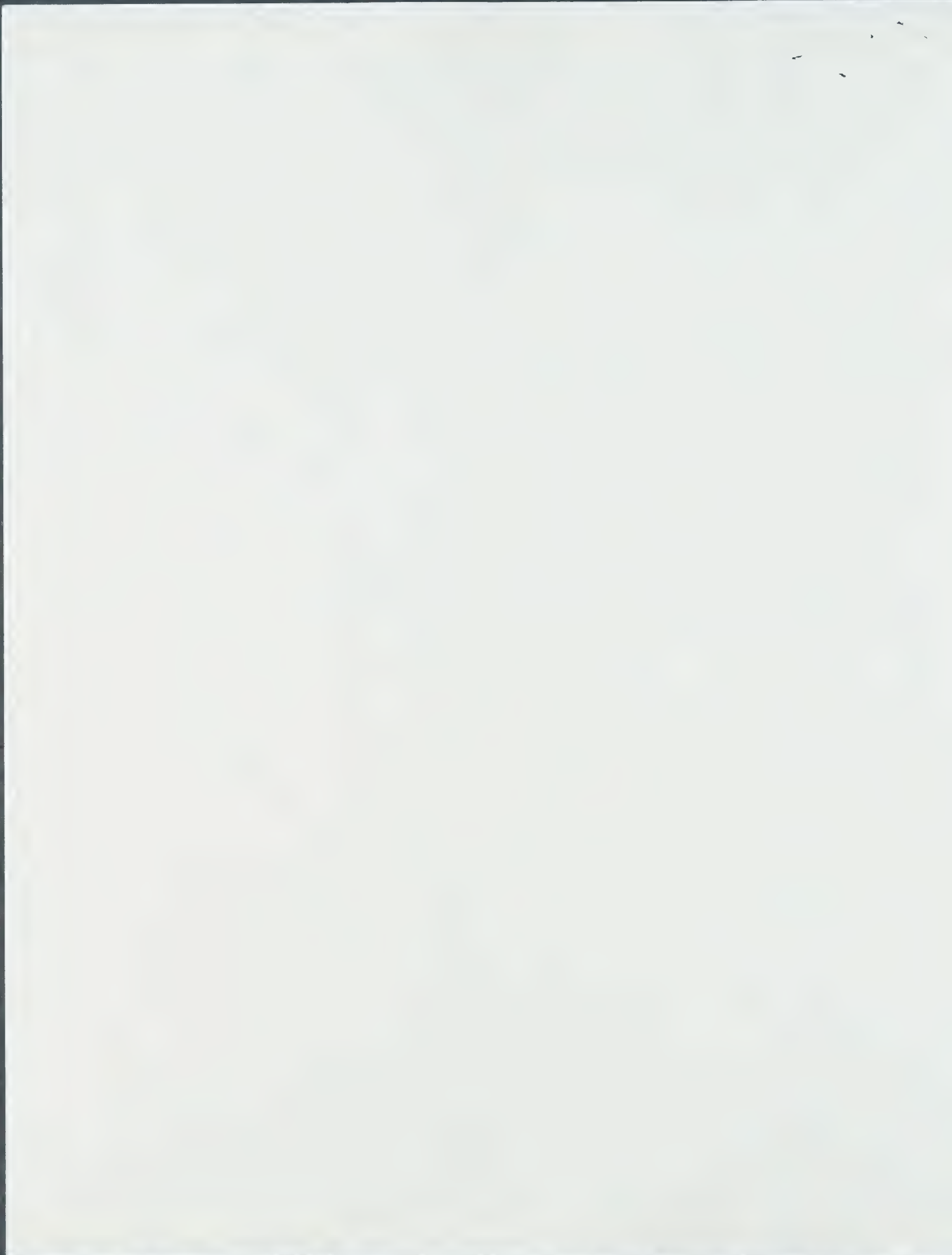
Will it suffice if my secretary, Marilyn Hassmann, calls you and asks you to purchase and transfer the funds?

Best wishes.

Sincerely,

*By Appointment Only*  
ASTOR HOTEL SUITE 622  
924 EAST JUNEAU AVENUE  
MILWAUKEE WISCONSIN USA 53202  
TEL 414 277-0730 FAX 414 277-0709







*Universidad Complutense de Madrid*

*Vice-Rector*

Dr. Alfred Bader  
2961 North Shepard Avenue  
Milwaukee, Wisconsin 53211  
U.S.A.

Madrid, August 26, 1993

Dear Alfred and Isabel,

When Jorge arrived back from Milwaukee, Margarita asked him: "Tell me about the average day with the Baders".

"Mom, there was no such thing. Every day was different and exciting".

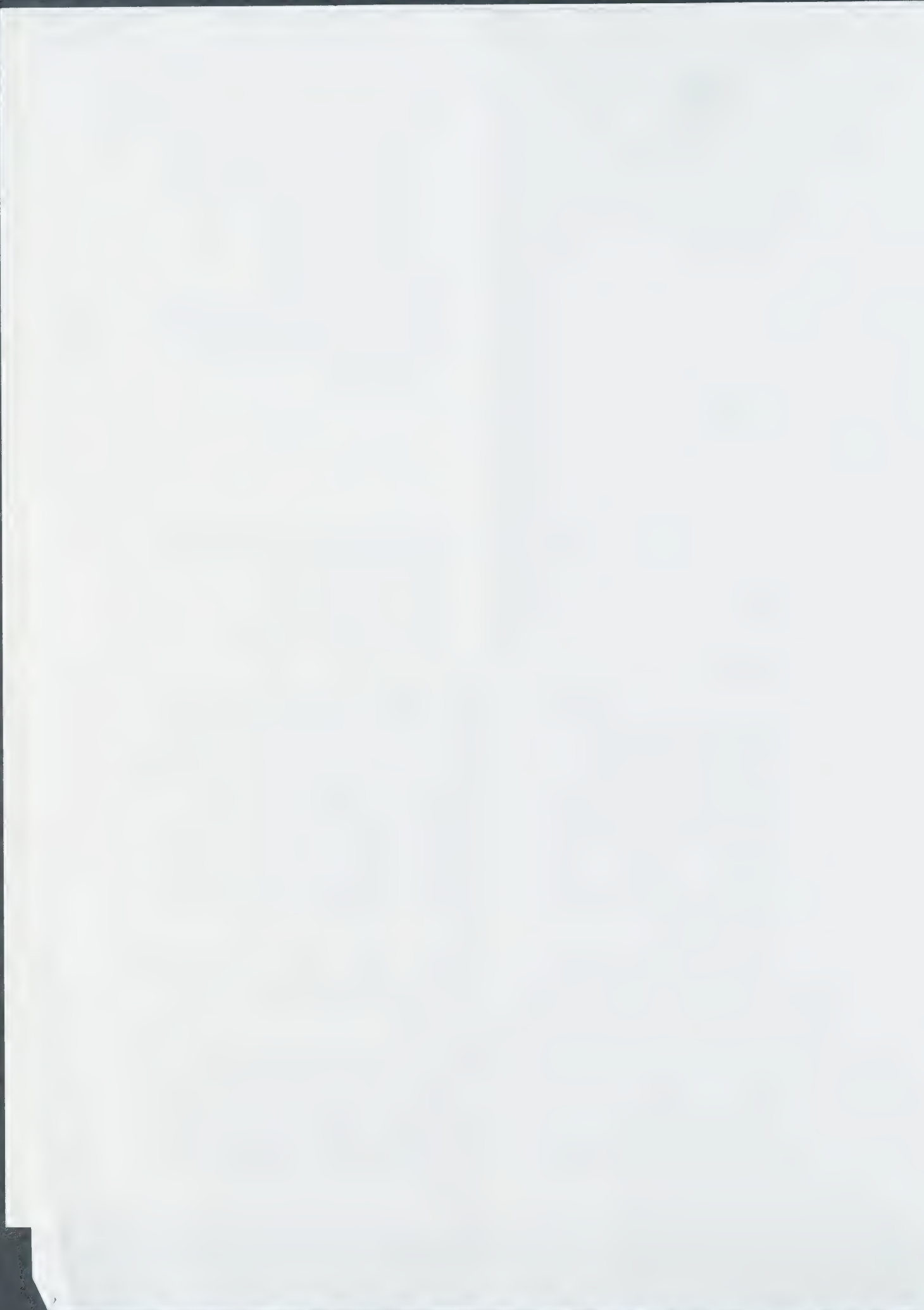
What else can we say?. Just thanks, thanks, thanks.

Jorge enjoyed every minute with you both, even the lectures, which he used to concentrate in the English he was listening to, as he did in "The Merchant of Venice". He enjoyed his visits to the museums, Fine Arts and Oskosh included, Old World Wisconsin, everything. He enjoyed his bicycling to the lake, his trip on Daniel's boat, his shopping, both with Isabel and alone, and he learned to be on his own in a foreign city and country. His English has improved a lot, he understands the Baders much better, he learned a great deal about many things and he is more mature. He even posed as a model for the first time: we all like the painting by Hemadi, already hanging in his room. Thanks.

Talking about paintings, the watercolor by John Walley arrived here safe and well. A most wellcome addition to the "Subsidiary of the Bader Collection in Spain"!.

Jorge also brought me the new, much improved version of the chapter of your autobiography. It is very well written and I enjoyed reading it. You know I did not like to see a man of your stature getting into "street fighting". The tone now is more detached and elegant. Perhaps the only part I would remove is that paragraph "if you publish it, I will have to deny it". I think Cori's character is already well depicted without printing a







*Universidad Complutense de Madrid*

*Vice-Rector*

private comment. I know you disagree with me on this, but I still think that a giant should not enter into public fighting with people of a much lesser stature.

I read all the articles and the book (what a delightful book!) on Loschmidt. It makes an interesting controversy. Although your own interpretation about the benzene circle is more likely, I think the objection by the "historian" is a honest and legitimate one, worth thinking about. And arguing about!. I would love to be present when you both meet and try to convince each other. I am sure that young Alfred, who won an arguing contest, will perform at his best!.

Concerning Loschmidt studies in aerodynamics, after seen his handwritten drawings, my feeling is that he did not envisage the hovercraft; he simply attempted to calculate the lift force of a flying surface, something also studied a few years later by Otto Lilienthal in Germany.

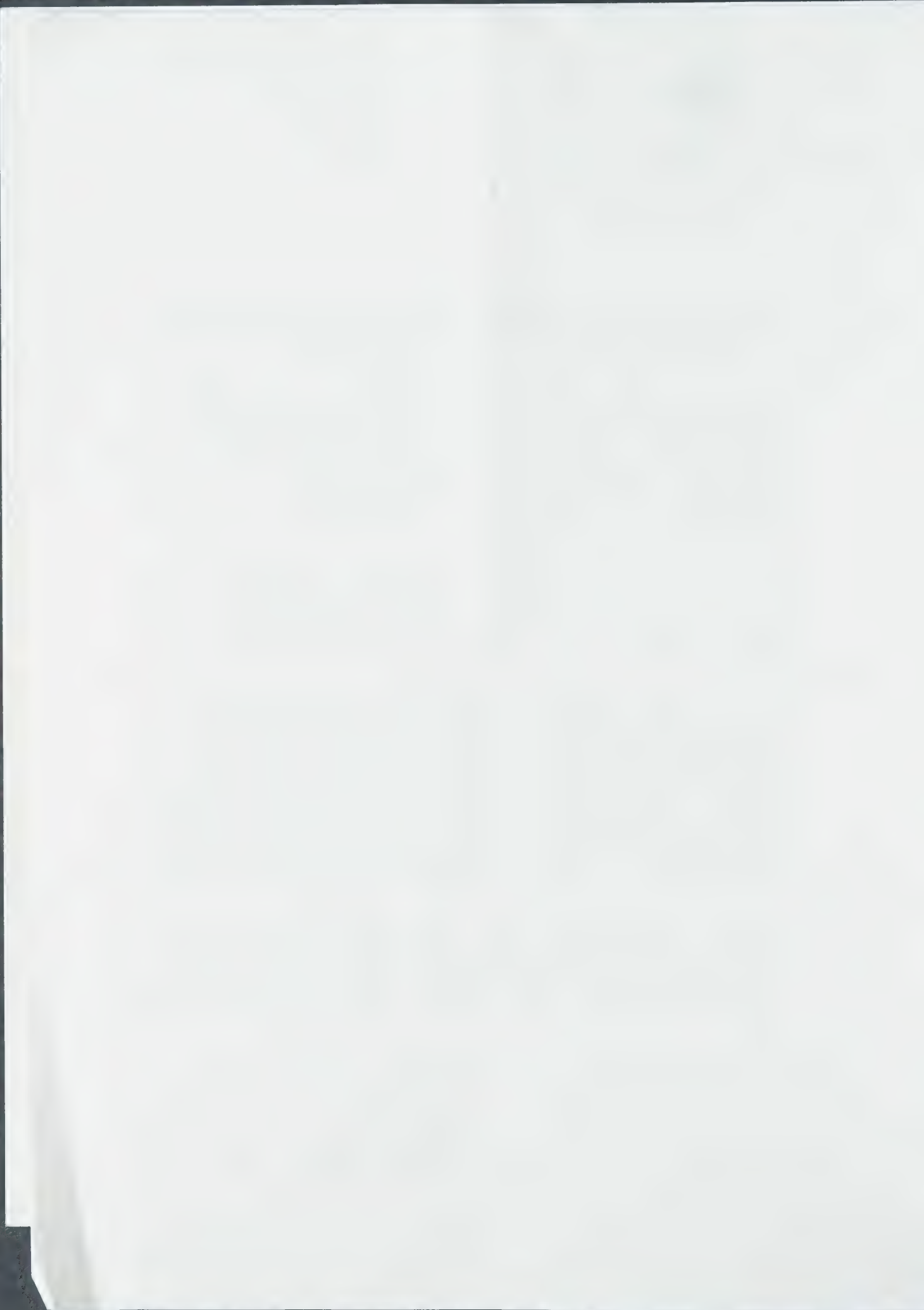
Now to more personal matters. The health of you both looked so good this summer that I could not accept any alibi for not coming with us next summer. It is time to make plans. According to the preliminary conversation we had on the Sabath, it seems that the last two weeks of August, 1994, will be the best for you. And for us, it will be also very convenient. Please, confirm at your earliest convenience that your plans definitely fit in this schedule, so that we can organize the program. Probably the best solution is that we meet in Madrid and drive together to the coast.

Once again, thanks for your invitation to Jorge, for the many activities you offered him and for the time Isabel devoted to him. Please, convey our thanks to Daniel, who, in a "most exciting time in his life", found the time to entertain Jorge. Our very best wishes for Daniel and Linda.

Love to you both

CARLOS SEOANE





Sept 3, 1953

Dear Alfred,

Thank you so much for a delicious dinner  
and a delightful evening with old friends.  
Enjoyed seeing the packing & so many lovely paintings.

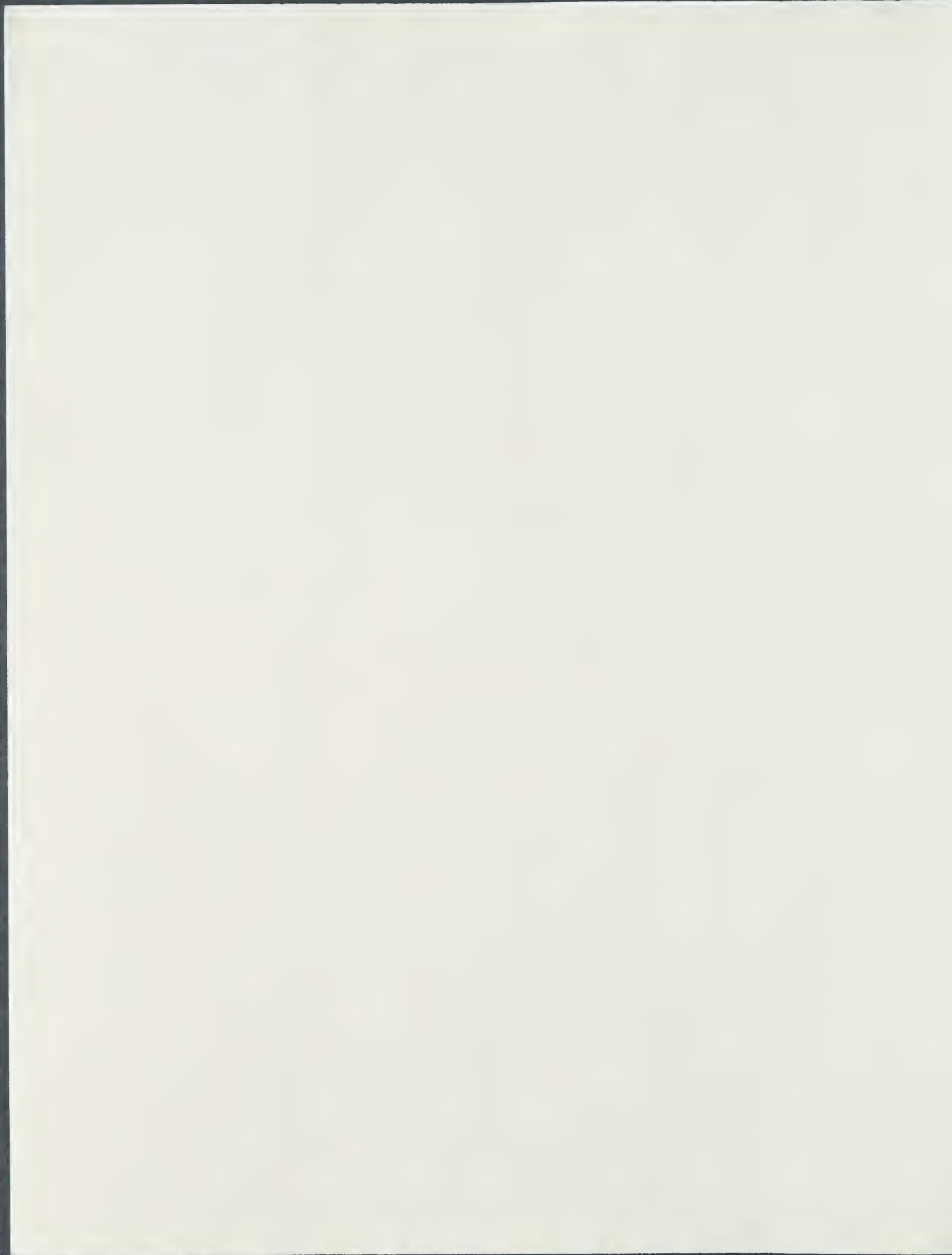
I want you to know how much I have  
appreciated Alrick's hospital and special care & Harold &  
Kendrew's to me when I was going through a  
divorce & when I was lonely & afraid.

The wisest thing I have done was to  
stay with Alrick. It has given me stability  
and security at least in fact & more all  
real security is in God. May He bless you  
and I will in all your endeavors.

Sincerely,

Lee S.







ALFRED BADER FINE ARTS

DR. ALFRED BADER

ESTABLISHED 1961

December 28, 1993

Professor Irwin Talesnick  
59 Silver Street  
Kingston, Ontario  
Canada K7M 2P6

Dear Irv:

As you know, Isabel and I travelled from home to England in November, and so I can respond to your three interesting letters only now.

Isabel and I don't quite know what would be involved in establishing a chair in science education at Queen's, and so I have shared your letter with Principal Smith, and he will let us know. Let us discuss this matter in detail when next we visit Queen's, probably next autumn.

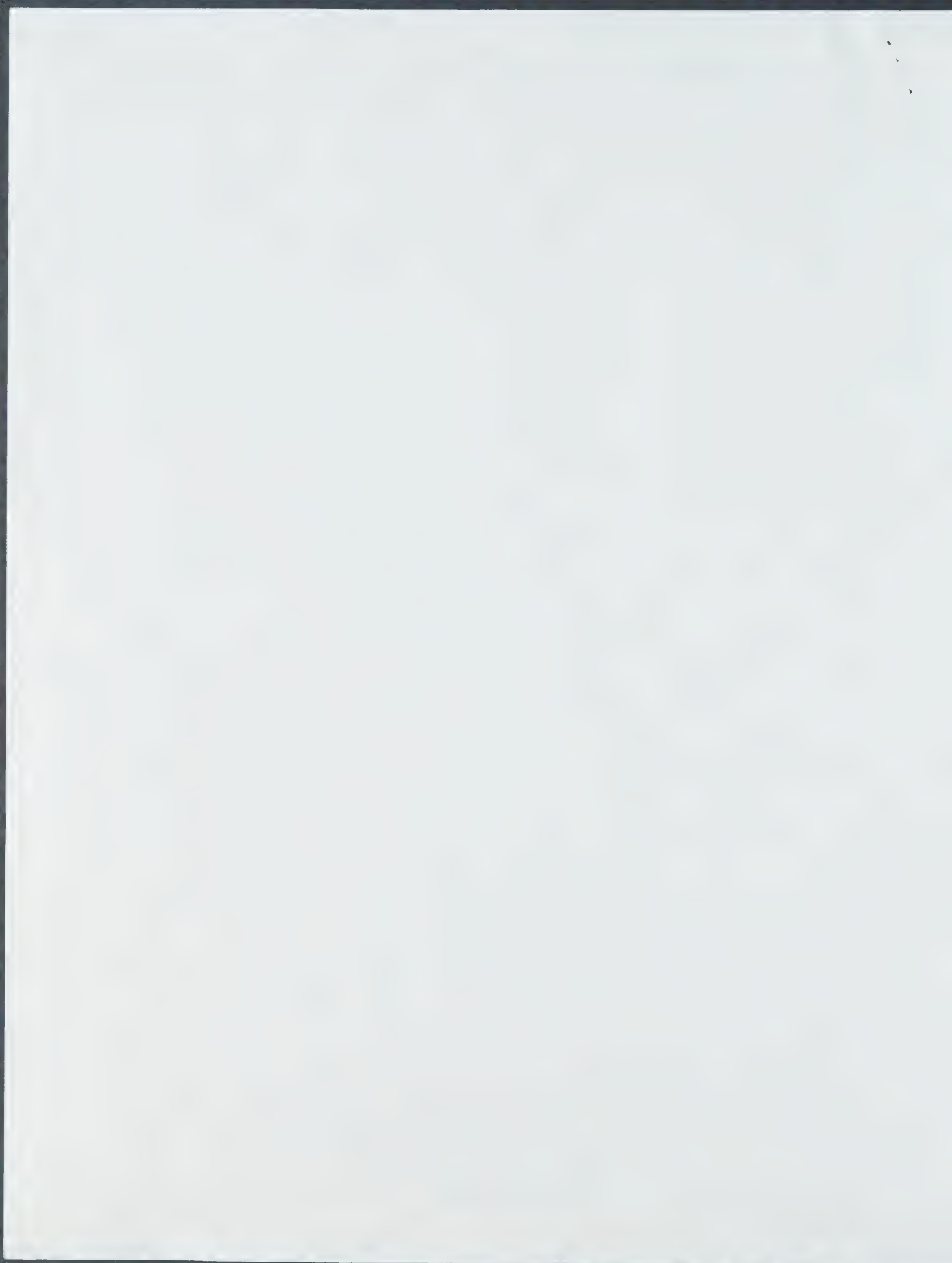
Naturally I will share your information about the home and school for battered children in Israel with my son, Daniel. It seems to me that this is the very kind of institution that the Helen Bader Foundation wants to help.

All good wishes.

Sincerely,

c: Mr. Daniel Bader

*By Appointment Only*  
ASTOR HOTEL SUITE 622  
924 EAST JUNEAU AVENUE  
MILWAUKEE WISCONSIN USA 53202  
TEL 414 277-0730 FAX 414 277-0709





11/5

**Irwin Talesnick**  
**59 Silver Street**  
**Kingston, Ontario**  
**Canada K7M 2P6**

November 8, 1993

Dr. Alfred Bader  
Alfred Bader Fine Arts  
Astor Hotel, Suite 622  
924 East Juneau Avenue  
Milwaukee, WI 53202

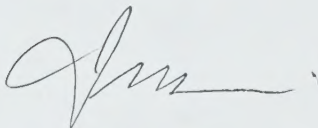
Dear Alfred:

During our visit at Summerhill you showed us, with considerable pride, the report of your family foundation which made grants to various charitable institutions in North America and in Israel. After returning home Ruth and I talked about the visit and discussed a situation that may be of interest to you and your son, in his role as president of the foundation.

During his student days my son-in-law spent some time as the volunteer rabbi in a home/school for battered children in Kiryat Gat. He eventually did part of his internship at the home and school. I should add that he is currently the rabbi in Monroe, New York, a small conservative congregation about 60 miles north west of New York City. I have not yet had the opportunity to visit the school, but I did, during a recent trip to New York, join my son-in-law at a meeting of the board of directors of the North American committee charged with the responsibility of fund raising for the school.

I have asked my son-in-law to send me some information describing the school and its function. I will forward the materials to you as soon as I receive them. From the list of projects that your foundation supported in Israel, Ruth and I assumed that this would fit into the category of an interesting and worthwhile project to be supported. Please tell me what steps to follow. I am looking forward to hearing from you on this matter so that a group of young people who are in serious need of help will receive the support that they need to lead proud and productive lives in Israel.

Yours sincerely,



Irwin Talesnick

21/15

**Irwin Talesnick**

**59 Silver Street**

**Kingston, Ontario**

**Canada K7M 2P6**

Telephone 613 544 6548 FAX 613 544 1292  
E-Mail TALESNIC@QUCDN.QUEENSU.CA

Monday November 8, 1993

Dr. and Mrs. Alfred Bader  
Alfred Bader Fine Arts  
Astor Hotel, Suite 622  
924 East Juneau Avenue  
Milwaukee, WI 53202

Dear Alfred and Isobel:

Ruth and I both enjoyed the visit with the two of you last week. It is always a pleasure to be included in your busy schedule when you visit Queen's. We have talked a few times about the very frank and meaningful remarks you made both at the Monday evening lecture on the Unimportance of a Liberal Arts Education and at the afternoon session in the Chemistry department. It is a source of pride to me that you show the pride in your Judaism in a public forum. I trust that this pride will continue to be up front for many years to come. Please excuse me for writing this letter to your office; I misplaced your home address.

This may be strange, but I have written three separate letters because, in addition to wanting to say how much Ruth and I enjoyed our visit with you, I wanted to talk to you about two independent ideas that came about as a result of our visit in Summerhill on Tuesday of last week. The two ideas are outlined in the two letters that are attached.

Thank you for giving me the regards from Liz and Garry Shapiro. I trust that you saw them in shule this past shabbat and gave my short message to them. I am looking forward to hearing from them in the very near future.

I mentioned to you that I would be at a conference in Milwaukee next fall. I made a small geographical error; the conference is in Minneapolis. I hope that I will have the opportunity of seeing you somewhere before you come to Queen's again next year.

Yours sincerely,



Irwin Talesnick



It is plausible, although certainly not proven, that the number of citations *per paper* is some kind of measure of the average quality/impact of the papers in question. It is similarly plausible that the number of citations *per professor* is some measure of the standing of the professors. (Or of the amount of time they can devote to research? Or of the amount of equipment at their disposal?) But the quantity "citations per paper per professor" has no apparent rationale or meaning whatsoever.

The data given show a clear positive correlation between citations *per paper* and the size of the faculty, but the regression line does not pass through the origin. Consequently, if one divides by the size of the faculty, one obtains numbers which diminish as the latter increases. So what? The hard fact is that a paper from a large department seems to have on average more impact than one from a small department, and doing meaningless arithmetic changes nothing.

E.W. Dewing, FCIC  
Kingston, Ontario

## Bader Dismissal a "Sad Loss"

Sir:

The article by John T. Edward, FCIC, on Alfred Bader was particularly poignant coming after the announcement of his "firing" by Aldrich. Aldrich is so closely identified with Bader, and vice versa, that it is a sad loss for all concerned. Bader understands the needs of the synthesis chemist. Aldrich will never be the same for me or for many others, I am sure.

Alan Shaver, MCIC  
McGill University

Sir:

I have read with great interest the articles by Ernest Carpenter (*Chemical and Engineering News*, April 6, 39, 1992), John T. Edward (*ACCN*, 44, June, 1992) and John Emsley (*Chemistry in Britain*, 28, June, 1992) concerning Alfred Bader, the Aldrich Chemical Company, Sigma-Aldrich and Dr. Bader's recent dismissal from his role as unpaid emeritus chairman, ambassador and consultant to Sigma-Aldrich. I have known Alfred since our freshman days in engineering chemistry at Queen's University in 1941 and have followed his career closely, both for this reason and because his M.Sc. supervisor at Queen's, Dr. Arthur F. McKay, was my first supervisor when I joined the Defence

Research Chemical Laboratories in 1952. I watched Aldrich Chemical grow, diversify and prosper, to the great benefit of organic chemists and organic chemical research in the academic and governmental sectors, because of its strong customer-oriented approach, as indicated quite clearly in the references cited. During the sixties, the research program of my group benefited substantially from the custom synthesis of numerous intermediates conducted by the Aldrich Chemical Company under Alfred Bader's supervision.

Soon after he graduated from Queen's, Alfred established the Martin Wolff Memorial Prize in Civil Engineering in memory of his undergraduate mentor. This was the beginning of his legendary generosity to his Alma Mater as well as to many other universities and individuals in North America, Britain and Europe, by establishing research prizes, scholarships and fellowships in the organic chemical area.

Quite clearly, the great success of the Aldrich Chemical Company, and later of Sigma-Aldrich owes its origin to the policies of personal and efficient service established by Alfred Bader. It therefore seems inconceivable to me that he would have done anything which might be construed as "betting against the company" he founded and nurtured. I have no doubt that his motive in using the route he did for sale of the very small percentage of his stock used to endow an organic chemical research chair at Queen's was as he stated.

The scenario is reminiscent of the situation depicted in a famous cartoon from "Punch" in the late 1800's, which shows Kaiser Wilhelm II of Germany watching Bismarck, his first minister, descending a ladder from the royal yacht into a rowboat, following his dismissal. Appropriately, the cartoon is entitled "Dropping the Pilot".

R.A.B. Bannard, FCIC  
Carp, Ontario

Sir:

Many thanks to John T. Edward, FCIC, Emeritus professor of chemistry, McGill University, for his writing of *The Aldrich Story* (*ACCN*/June 1992). As a chemistry student at Queen's University, I had gleaned some appreciation from my mentor, R.Y. Moir, FCIC, of Alfred Bader's remarkable career and earlier association with Queen's, but Edward's account afforded numerous new insights. Too little has been written about too few of Canada's chemical personalities. As an association, we should have more biographies of this nature. We are fortunate, indeed, when someone like Edward expends the necessary time, energy,

and devotion to chronicle a facet of our rich chemical history.

George Neville, FCIC  
Bureau of Drug Research  
Health and Welfare Canada

## Intersperse the Mathematics with the Course

Sir:

I read with considerable interest the March 1992 issue of *ACCN* featuring *Chemical Education: Focusing on Physical Chemistry*. I was especially taken up with the article by P.W. Atkins. Many of the statements by Atkins strike a familiar chord, e.g. "...physical chemistry is intrinsically mathematical...to give quantitative spine to the qualitative insights of chemistry...". In my 40 years of teaching general and physical chemistry at many levels from the ridiculous to the sublime, I have found the best approach is to intersperse the mathematics with the course to illustrate to the student the desirability of acquiring the technique. Also every opportunity is taken to encourage model building and to convert intuitive notions into quantitative form. From my experience I can allay any doubt one might have about the mutual benefit derived from being involved in these aspects of teaching physical chemistry.

Some of Atkins' suggestions, e.g. "the phase rule...is more elegant than useful" and "colligative properties with the exception of osmosis are largely irrelevant..." merit further consideration. These suggestions impact on the fundamental question whether universities should continue to focus mainly on the intrinsic and intellectual values of physical chemistry, or for that matter any other academic subject, with practical overtones or should the teaching of physical chemistry be strongly oriented towards careerism. The choice is between education-cum-training or strictly training? Without knowing the limits or degree of elegance and usefulness Atkins has in mind I interpret his suggestions in the context of effective material coverage in a limited time interval with respect to a specific audience level. The treatment of any topic in physical chemistry must be tuned into the background, interest and intellectual wavelengths of the audience.

An observation may be in order on the recent reaction to Atkins' suggestions (June 1992 *ACCN*, Mary Ann White, MCIC). "the phase rule is very useful in understanding



