

CROSS REFERENCE SHEET

Name or Subject

Frost, E. B.

File No.

Regarding

Date

SEE

Name or Subject

Yerkes Observatory
Astronomy
Royal Society of Great Britain

File No.

File cross reference form under name or subject at top of the sheet and by the latest date of papers. Describe matter for identification purposes. The papers, themselves should be filed under name or subject after "SEE."



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Name or Subject

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Yerkes Observatory
Astronomy
Royal Society of Great Britain

Name or Subject



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File cross reference form under name or subject at top of the sheet and by the latest date of paper. Describe matter for identification purposes. The paper, themselves should be filed under name or subject after "SEE."

Jul 14 1901



President W.R. Harper,

My dear Sir:

It is quite presumptuous, I know, to assume that my plan for enlarging the sphere of influence of the University has not already long since occurred to you. I will run the risk of this, however, in suggesting a plan which recently suggested itself to me.

It is now time that foreign students should come to America for a part of their education, quite as much as the reverse should be the case. It would probably not be difficult to get students from many of the European countries; but Germany would doubtless present the greatest difficulties in the way of establishing a current of students to this country. It would be well to make the attempt at the most difficult point; therefore the work would be easy.

Now you doubtless have among your acquaintances many wealthy German-Americans who would delight in making such an experiment by giving from three to five scholarships of say 5000 Marks each (to cover two years) open to picked Abiturienten from the Gymnasien and Realschulen of a given German city, province or Kingdom, and providing for two years of Chicago University study, and covering the expenses of passage in addition to University fees, for tuition, dormitory, etc. It would be made clear that these stipendia were not to induce immigration, and, with the assistance of men of our consular service, it would seem possible that a healthy competition would arise among promising German youth for this opportunity of an American education (Bachelor's degree, entering as students of Senior College). Without going into any further details, I merely offer the suggestion as one perhaps worthy of consideration. Very truly yours,

Edwin B. Frost

ly 20, 1901.

My Dear Mr. Frost:-

Your letter of July 14th has been received, and it seems to me that your suggestion is a most excellent one. I am entirely willing to join hands with you in the effort along this line. What can you suggest as to its execution? Have you, for example, any one with whose name we could start?

Yours very truly,

W. R. Harper

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Yours very truly,

W. R. Harper

February 26th, 1904.

Professor E. P. Frost,
Williams Bay, Wisconsin.

My dear Mr. Frost:-

A little difficulty about Mr. W. A.

Cogshall's registration having occurred, he writes that he gained from you the impression that he was entirely unnecessary to register "every little while". The rules of the University are very strict in this matter, registration being required at the beginning of each quarter, this being the only possible way by which we can keep correct accounts of the institution, whether educational or financial.

Yours truly,

W. R. Harper

February 26th, 1904.

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Yours truly,

W. R. Harper

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

✓
April 3, 1905.

My dear Dr. Harper:

I recently saw, at his son's house, the plans which our Trustee, your friend Mr A.C. Bartlett, intends to use for a house at Lake Geneva. In connection with his grounds, he will doubtless engage the services of some well-known landscape architect. Now do you not think he would accept a suggestion from you to let the same architect draw up a plan for the development of the Observatory grounds, at his (Mr Bartlett's) expense? With a plan for the future thus established, we could make a small beginning toward the future development of the grounds by setting out trees ourselves; and instead of letting the grounds be cut up by driveways which would have to be abolished in the future, we could make the necessary driveways conform to the architect's plan.

I regret that some such proposition as this was not made to Mr Hutchinson when Mr Olmsted was laying out his grounds; but I hope that the present possible opportunity may be realized for the benefit of the University.

Very truly yours,

Edwin B. Frost

E.B.F.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.
The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

PAID ADDRESS
YERKES OBSERVATORY
CHICAGO

April 3, 1905.

My dear Dr. Hargis:

I recently saw, at his son's house, the plans which our Trustees, your friend Mr. A.C. Bartlett, intends to use for a house at Lake Geneva. In connection with his grounds, he will doubtless engage the services of some well-known landscape architect. Now do you not think he would accept a suggestion from you to let the same architect draw up a plan for the development of the Observatory grounds, at his (Mr. Bartlett's) expense? With a plan for the future thus established, we could make a small beginning toward the future development of the grounds by setting out trees ourselves; and instead of letting the grounds be cut up by driveways which would have to be abolished in the future, we could make the necessary driveways conform to the architect's plan.

I regret that some such proposition as this was not made to Mr. Hutcheson when Mr. Olmsted was laying out his grounds; but I hope that the present possible opportunity may be realized for the benefit of the University.

Very truly yours,

William D. Bond

E.B.R.

EDWIN B. FROST,
YERKES OBSERVATORY,
WILLIAMS BAY, WIS.

✓ April 14, 1905

My dear Dr. Harper: I did not avail myself of your kind permission to call upon you again, as I inferred from a talk over the phone with Mr. Hickman that you and he had not up to Thursday had a conversation in regard to my tenancy of the director's house at the observatory. I found his letter (enclosed herewith) on my return. It was written before he had seen you, and he expressed over the phone the idea that you might suggest how the desired end could be attained.

I cannot help feeling that the obstacles Mr. Hickman regards so seriously are rather technical-legal than practical.

According to the plan I proposed (a copy of which I left with you) the University would not lose any rental as compared with my remaining in this house, but the ^{House} would be repaired without requiring more money to be raised for the purpose; and I could begin what (D.V.) should be a long term of rental, at what

is certainly a profitable rate. I also offered a cash gift of \$150.

The requirements for official entertaining constitute the principal reason for our thinking it best to move. But if we are to occupy the house a year or two hence, it would be far better for us to go in now. Just as soon as the observatory staff is rehabilitated and the vacant professorship of Astrophysics (Mr. Hale's place) is filled, both houses will be needed. Meanwhile the smaller house would not far ~~above~~ ^{exceed} ~~trailing~~ ^{trailing} the larger, - to which parties.

I do not understand how the Trustees can regard their investment in these houses as so doubtful as Mr. Hickman's letter implies. At a total cost of about \$10,500 they have already brought in an income of some \$7,000, with repairs probably not exceeding \$700. expended so far.

It is of the highest importance that we should get the matter

EDWIN B. FROST,

YERKES OBSERVATORY,

WILLIAMS BAY, WIS.

settled at the earliest possible moment, as all affairs of the grounds and gardens need to be arranged by the first of next week. And if we move, it is highly important that we do so in May or early June.

Regretting that I have troubled you to give attention to this matter - minute in ~~affairs~~ ^{comparison} to University affairs as a whole, but important to us,

Yours With kindest regards,

Very sincerely yours

Edwin B. Frost

(3)

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it occurred of the first of the
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no. 1. Jan. 1st. 1884. 1884.

Very sincerely,

Edwin Frost

Frost EB

June 21st, 1904.

Mr. Edwin B. Frost,

Williams Bay, Wisconsin.

P.S. If there are any points which need immediate
attention, Mr. Frost, - and I will take them up through the
telephone next Saturday or Sunday on my return from the East.
I had hoped that before this time everything
would have been settled. We have been disappointed in the
matter but it will go through just the same. Please be patient.
I understand that everything is going the way we proposed but
that we will have to accomplish the matter in a little differ-
ent way from that which we originally planned. You have been
appointed acting Director and I *hope that you are* exercising
the functions of this office, although no formal statement has
been sent you by the Secretary of the Board of Trustees. I am
going East tonight to make commencement addresses, will be
in St. Louis next week at the National Education Association
and will come to Lake Geneva for good about July first.
Kindly
If you will ~~not~~ exercise patience until that time every-
thing will be straightened out according to the plan we have
proposed.

Looking forward with pleasure to seeing a great deal of
you in the near future, I remain

W. R. Harper

Trust 33

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YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

October 28, 1904.

President W.R. Harper.

My dear Sir:

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After a thorough discussion of the matter between Mr Hale, Mr Barnard, and myself, on the occasion of Mr Hale's recent visit here, we decided that we should be serving the best interests of science and of the Observatory if we abandon the plan of sending an expedition to observe the total eclipse of the Sun visible in southern Europe next August. Inasmuch as the circumstances seem to make it entirely impossible for either Mr Hale or myself to go and to undertake bolometric or spectroscopic observations, the only observations which could be included in our scope would be direct photography of the corona by Professor Barnard. If we could be assured of clear weather, there can be no doubt that excellent photographs on a large scale would be obtained. But in Spain, where alone the duration of totality would be long enough for the purpose, the chances of clearness and cloudiness are considered to be about even. On such a chance, it has not seemed to us that it was on the whole best to lose three months of Mr. Barnard's observations here, which are certain of yielding valuable results. Moreover, the money required, which would include over \$2000 for a new lens, and which would scarcely come within the \$5000 we had figured on, could be

YERKES OBSERVATORY
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would include over \$2000 for a new lens, and which would

scarcely come within the \$5000 we had figured on, could be

spent to better advantage in meeting other needs of the Observatory. These I should be glad to bring to your attention at another time. Furthermore, the Lick Observatory proposes in any case to take photographs on quite a large scale at three stations, and the chances are thus excellent that good photographs of the corona will be obtained.

It is, however, our unanimous opinion that more valuable and certain results can be obtained if Professor Barnard can carry out the plan he has long desired to ~~do~~, namely, to transport the new Bruce Telescope to the favored location on Mt. Wilson, and there to continue and to extend to more southern regions of the sky his important work of photographing the Milky Way and diffused nebulosities in the heavens. This expedition would probably require six or eight months and could be conducted without great expense on the part of the University, as Mr Hale has at his service a gift from a gentleman at Pasadena which would largely cover the expenses of transportation. The special point at which additional funds would be required from the University would be in supplying the photographic plates, which are very expensive and which would be needed in great quantities at Mt. Wilson, where observations could be carried on nearly every night for a long season. These negatives should be the property of the University, and the plates should, therefore, be supplied by the University. Mr Barnard and I have estimated that this whole expense could

be covered by a special grant of \$500. It is certain that
aside from the great scientific value of these photographs
by Mr Barnard, they command an instant popular interest,
and would doubly contribute to the influence of the
University.

Very truly yours,

Edwin B. Frost

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Very truly yours,

Edwin A. Ford

January 9, 1905

Mr. W. B. Frost,

Yerkes Observatory,

Williams Bay, Wisconsin.

My dear Mr. Frost:

I have myself gone over the report of Mr. Hale in detail. It is an admirable and important presentation. I am inclined to think, however, that it contains a great deal of matter which would be more appropriate as a technical statement to astronomers. I am therefore writing to propose that we take a considerable portion of it and prepare the same for separate publication in possibly the Journal of Astrophysics, or if necessary in a separate pamphlet. The technical detail is more than we have been accustomed to publish in our report, and as a matter of fact, if all the departments were to do this, we should have to issue a report of two or more volumes. I am proposing that you should go through the report from this point of view and select say fifteen or twenty pages of the manuscript for the President's report, reserving the rest for separate treatment.

Hoping that this will commend itself to you under all the circumstances, I remain,

Yours very truly,

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Yours very truly,

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YERKES OBSERVATORY

January 16 1905.

My dear Professor Frost:

I am glad to get your opinion in reference to Mr. Hale's report. I understand that you will send the whole matter to him for change. At the same time it should be noted that we are rapidly approaching the date of publication, and that if this means a delay of two weeks or even ten days, I am afraid it will mean the exclusion of this report.

I will convey to Mr. Murphy your invitation. I have read with much interest the statement of Professor Backlund. This is surely interesting.

I will be able to talk with you definitely with reference to matters in a very short time.

I have noted your report concerning Mr. Judson and have notified Mr. Judson. Please convey to Mr. Jenkins our sincere sympathy in the illness through which he is passing.

Very truly yours,

W. R. Harper

Professor E. B. Frost,
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My dear Professor Frost:

January 18 1905.

January 11, 1905.

President W.R. Harper.

My dear Dr Harper:

This thanks you for your letter of January 9th, in respect to Mr Hale's report. I thoroughly agree with you that it would be desirable to have the whole report published in the style of the previous Director's report, in a separate pamphlet for distribution to our mailing list of about 500 names of persons who would be interested in the technical details. Under the circumstances, it would, of course, be desirable to limit the amount in the President's report to the fifteen or twenty pages of manuscript, as you suggest. As Mr Hale had, at my request, agreed to make an abstract from the report (for it seemed to me so much fairer that the author of the report should make the abstract himself, rather than another party) I shall send on the whole report to him for that purpose, unless I should hear from you within a couple of days to the effect that there is not time for the manuscript to go to Pasadena and return.

2) I understand from the newspapers that Mr Murphy is at the University. If he should desire to favor us again with a visit, we should be very glad to see him, and I could meet him at any train if I could know a little in advance when he would arrive.

3) I think you would be interested to hear a remark or two from a letter I have just received from Professor Backlund, Director of the great Pulkova Observatory. "It was only a great pity that I could no longer enjoy your company

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and, Director of the Great Foulkova Observatory. "It was

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My dear Dr Harper:

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January 11, 1905.

extremely fine institution more in details. The two days at Yerkes Observatory were the most agreeable I could expect in America. One circumstance struck me very much at your Observatory: the intense work. You seem to dispose of much more force at Yerkes Observatory than at other Observatories, at least in European observatories." By "force", you will understand that he means steam pressure to the square inch, and not to the number of the staff. At Poulkova, they have probably three times as many scientific assistants as here. I send you this extract so that you may see that the men who are here seem to impress competent judges as trying to work hard, although we are so greatly undermanned at present. You have doubtless noted in the newspapers the discovery of a sixth satellite to Jupiter, with the Crossley reflector at the Lick Observatory. The discovery might just as well have been made here, if we only had some one who could work systematically and continuously with our 2-foot reflector. In fact, two or three plates taken here since the announcement of the discovery of the satellite indicate its presence. For more than a year, there has been no one who could be assigned to regular work with the reflector, with which Mr Ritchey had previously worked, as his other duties as Superintendent of construction permitted. Furthermore, in spite of the number of problems requiring physical investigation, our splendid spectroscopic laboratory in the basement has had to lie idle since Mr Yerkes's gift ran out last May (except as it was used by Mr Brown in the Summer).

Mr Hale writes me that he is in communication with you, and I hope it will be possible that action will soon be

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taken so that the budget for next year can be fully straightened out.

I regret to say that the health of Mr Jenkins, fellow, is such that he is unable to leave the house, and he desires me to arrange that he shall not receive any stipend from his fellowship during the next quarter; until he is able to work, at least. I presume I ^{should} ~~shall~~ take this up with Dean Judson.

Very truly yours,

Edwin B. Frost

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desires me to arrange that he shall not receive any stipend
from his fellowship during the next quarter; until he is able
to work, at least. I presume I shall take this up with Dean
Johnson.

Very truly yours,

W. B. Brewster

339

Chicago, February 10, 1905.

My dear Dr. Harper:

After a night spent largely in considering our unhappy financial situation, I feel that I ought to write you at once to state how absolutely impossible some of the propositions are which we discussed for the Observatory. Take the immediate situation. Four people at the Observatory have not yet received their January salaries, which they had, with every reason, expected would come to them as soon as the salaries paid Messrs. Hale, Ellerman and Ritchey were released. It is impossible for us to turn them off without notice and with back pay due them; and let us see how it would leave us for the next five months. Omitting the case of Mr. Schlesinger and Miss Ware, in hope that it will be provided for as heretofore by the Carnegie Institution, we should lose Messrs. Parkhurst and Fox. Now, that means that the solar work, which is one of the strongest points in our work as compared with that of other observatories, would have to be cut off at once, just as the increasing activity of the disturbances on the sun require special observations. Mr. Parkhurst is the only man who has had experience in the use of the two-foot reflector (Mr. Fox has taken perhaps half a dozen successful pictures with it). Thus the two-foot reflector would be thrown out

333

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Dr. Harper,

-2-

of commission. Furthermore, there would be only left for observing with the 40-inch telescope Mr. Burnham and myself (aided by Mr. Barrett). Thus three nights per week with the great telescope would be unprovided for, and the loss in this way until the new budget would start in would be exceedingly great. It would not be possible for the three left to observe on additional nights and have any time for work during the day (Mr. Parkhurst and Mr. Schlesinger share the three nights in the absence of Professor Barnard). The working staff of the Observatory would thus consist of Mr. Burnham and myself, assisted by Mr. Barrett. This is an impossible situation, and one which cannot be settled by promise of a letter to Mr. Yerkes.

The arrangement made with Mr. Hale last May, -which was also to an extent made with me, as it prescribed certain conditions under which alone I was willing to serve as Acting Director, - covered the year, although there was no definite time set for the duration of the "expedition", or when it should be merged with the then possible Carnegie Observatory. I have not the slightest belief that Mr. Hale will have any authority or be able to get any authority to transfer to the Observatory, from Carnegie funds appropriated for use after the expedition had paved the way for the establishment of a great solar observatory, the equivalent of the salaries received while on the "expedition."

Furthermore, if he had been willing to associate the University name with the enterprise still longer, I infer that you would have had no objection to having him give his salary (the same as Mr. Ellerman and Mr. Ritchey) for the purpose of paying for the four people who have hitherto been carried on the Carnegie appro-

in case of

of commission. Furthermore, there would be only left for observing with the 40-inch telescope Mr. Burnham and myself (aided by Mr. Barrett). Thus three nights per week with the great telescope would be unprovided for, and the loss in this way until the new budget would start in would be exceedingly great. It would not be possible for the three left to observe on additional nights and have any time for work during the day (Mr. Parkhurst and Mr. Schlesinger share the three nights in the absence of Professor Barnard). The working staff of the Observatory would thus consist of Mr. Burnham and myself, assisted by Mr. Barrett. This is an impossible situation, and one which cannot be settled by promise of a letter to Mr. Yerkes.

The arrangement made with Mr. Hale last May, which was also to an extent made with me, as it prescribed certain conditions under which alone I was willing to serve as Acting Director, - covered the year, although there was no definite time set for the duration of the "expedition", or when it should be merged with the then possible Carnegie Observatory. I have not the slightest belief that Mr. Hale will have any authority or be able to get any authority to transfer to the Observatory from Carnegie funds appropriated for use after the expedition had paved the way for the establishment of a great solar observatory, the equivalent of the salaries received while on the expedition.

Furthermore, if he had been willing to associate the University name with the enterprise still longer, I infer that you would have had no objection to having him give his salary, the same as Mr. Ellerman and Mr. Ritchey, for the purpose of paying for the four people who have hitherto been carried on the Carnegie appro-

Dr. Harper,

-3-

priation for work at this Observatory. Now, I believe most firmly, and everyone connected with the Observatory believes, that it is much better for the Yerkes Observatory and for the University that it should have no connection except kindly interest with the new observatory; therefore I do not see why you should feel that the rather unexpectedly short life of the expedition should constitute a claim against Mr. Hale, and should make you feel that the special provisions of last May, duly agreed to, should be abrogated. Of course you understand that I engaged a stenographer, Miss Maltman, and a computer, Miss Graves, for one year upon your authorization.

I propose to see Dr. Isham to-day, and consider with him whether the Visiting Committee should be called upon to help us in this emergency, that is, to provide for the budget for the next fiscal year. But I see absolutely no other way than to appropriate the money saved on the Mt. Wilson salaries for the first six months of 1905 to pay the people now waiting for money to pay their January bills. I will not ask the Trustees to give them any appointments in connection with the University, but merely to transfer this sum to be expended for assistance during the first half of 1905. It is sure to be very injurious to any consecutive scientific work to have a cut made in the services of assistants during what is supposed to be a lean year, when in the next year funds may be ample for their engagement. Scientific experts will not submit to being thus engaged and dropped like day laborers.

If some arrangement like the above cannot be made, I shall have to request you not to nominate me to the Trustees for the Directorship, as I could not accept the position under those

prision for work at this Observatory. Now, I believe most
 firmly, and everyone connected with the Observatory believes,
 that it is much better for the Yerkes Observatory and for the
 University that it should have no connection except kindly interest
 with the new observatory; therefore I do not see why you should
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 will not submit to being thus engaged and dropped like day laborers.
 If some arrangement like the above cannot be made, I shall
 have to request you not to nominate me to the Trustees for the
 Directorship, as I could not accept the position under those

Dr. Harper,

-4-

conditions. Of course provision would have to be made in the budget for 1905-6 for the extra \$1,000 for the incoming Director.

Mr. Yerkes's address is Hamilton House, Victoria Embankment, London. I will write the letter that you suggested, indicating what might be said to him towards appropriations for the work of Mr. Fox and Mr. Parkhurst. I think the appeal will be fruitless, however.

I hope that you are feeling very much better to-day than when I saw you yesterday, and with best wishes for a speedy improvement,

Very sincerely yours,

Edwin B. Frost

Dr. Harper,

-4-

conditions. Of course provision would have to be made in the
budget for 1905-6 for the extra \$1,000 for the incoming Director.
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what might be said to him towards appropriations for the work of
Mr. Fox and Mr. Parkhurst. I think the appeal will be fruitless,
however.

I hope that you are feeling very much better to-day than
when I saw you yesterday, and with best wishes for a speedy improvement,
Very sincerely yours,

Edwin A. Ross

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

February 11, 1905.

My dear Dr. Harper:

I first of all hope that you are feeling better than when I last saw you; without wishing to intrude my unwisdom upon matters of so grave importance as your own health, I do most earnestly hope that conservative counsels^{ss} will prevail. I conveyed your message to Dr. Chamberlin and he said he intended to write to you what he so strongly felt in regard to such conditions.

Regarding your request that I should estimate the contributions from the University of Chicago toward the establishment of its Solar Observatory on Mt. Wilson, I would summarize: Mr Hale's salary, eight months from May 1, 1904 \$2000; Mr Ellerman's salary for the same period \$667; total \$2667. The loan of the Snow telescope with its many accessories is, of course, a very important contribution but difficult to estimate in money, as time is the principal issue; it could not be duplicated within a year's time. Of course, Mr Hale was in California through the winter but that was merely his vacation; and Mr Ellerman was away for a couple of months in the early Spring, but that also would be regarded in the same way.

Regarding the budget, I am unable to see any possibility by which the Observatory can be run with the addition of \$1500 for Mr Burnham and the excision of \$1500. I cannot see but there is bound to be a deficit. If the items of Supply and Expense and Equipment had not been cut down by \$650, we

* parallel on my notes of our recent conversations.

and expense and adjustment had not been and soon as I can, we
see that there is going to be a deficit. If the terms of subsidy
of \$1200 for Mr. Williams and the execution of \$1200. I cannot
put it off after the opportunity can be had with the addition
regarding the budget. I am unable to see any possi-

bility, but that it will be decided in the same way.
and Mr. Williams was asked for a couple of months in the early
sessions of the committee and that was merely the decision:
he substituted within a few days time. Of course, Mr. Williams was in
estimate in money as time is the principal issue: it could not
of course, a very important consideration but different to
the loss of the other resources which are much necessary to
Mr. Williams, a salary for the same period: about \$200.
nothing. Mr. Williams, salary, about \$1000. I have \$2000:
payment of the other opportunity on Mr. Williams. I would con-
siderations from the University of Chicago toward the estab-
lishing a new school that I should estimate the
in regard to other conditions.

He said he intended to write to you that he is extremely busy
with business. I conveyed your message to Dr. Chamberlain and
himself. I do most earnestly hope that some of the committee
will maintain upon matters of no great importance as will our
better than when I last saw you: without attempting to include

I think of all hope that you are feeling
my dear Dr. Williams:

Berkeley II, 1902.

might have carried Mr Sullivan on those funds, but a cut on those accounts amounts with us to another cut on the pay roll under the circumstances.

It would be necessary that the Director should reserve the privilege of shifting the items as the internal necessities may absolutely require during the progress of the year 1905-6; e.g., it may be necessary to save on books and use a part of the appropriation for salary money.

But I respectfully propose that this department be treated in the same way as the budget of the whole University; that is, be raised from last year in the proportion of \$245,000 to \$300,000, and then that it be cut as has been duly apportioned. That is to say, taking last year's appropriation for pay roll \$17,600, the increase would be to \$21,550; the cut would be, pay roll \$1500, S & E and Equipment cut \$650, Books \$95; total \$2240. The net result to the department would be \$19310, from which we would provide as follows:

Salary attaching to the directorship	\$1000
S.W.Burnham	3000
E.E.Barnard	3000
E.B.Frost	3000
Moulton	2000
Laves	2000
Johannessen	1200
J.A.Parkhurst	1000
Fox	840
Barrett	300
Sullivan	750
Miss Graves	500
Miss Maltman	720
	<u>\$19310</u>

This arrangement is proportioned precisely as to the arrangement of the whole budget of the University, makes this department suffer just as much as any, and would make a workable appropriation for the year; but with no increase of our force

subordination for the local: but with no increase of our force
 department and let them be made as small as possible, and make a complete
 arrangement of the whole subject of the industrial, making this
 this arrangement is also proposed because it is so the

	1880
Miss Johnson	150
Miss Gleason	200
Miss Allen	120
Miss Lee	100
Miss	80
Miss	1000
Miss	1500
Miss	2000
Miss	2000
Miss	2000
Miss	2000
Miss	2000
Miss	2000

which is made subject to the directors
 which is made subject to the directors

1880. The net result to the department would be \$12500. from
 the year 1880. a & a and payments are \$200. books for: total
 \$12,500. the increase would be to \$12,500. the net result is
 that is to say, during last year, a subordination for the year
 \$200,000. and then that it is so and we have been only subordinated.
 so much from last year in the subordination of \$200,000 to
 in the same way as the subject of the whole industrial: that is,

that I have already shown that this department is created
 and is part of the subordination for industrial money.

last year 1880-81: it is not necessary to have on books and
 necessary and especially require during the progress of the
 whole the business of existing the same as the industrial

it would be necessary that the director should re-
 under the circumstances.

these accounts should be made as to produce one on the day to
 which have existed in business on these funds, but a one on

except as providing for Mr Parkhurst and Mr Fox, hitherto cared for the by the Carnegie Institution, although really working practically purely on Observatory routine. I should be most happy to direct the affairs of the institution on this basis and, as I stated to you orally, should be ready to waive any increase in my salary until July 1st, if I should be appointed Director at this time.

With best wishes for the improvement of your condition, and the greatest sympathy for it.

Very truly yours,

Edwin B. Frost

E.B.F.

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for the by the Carnegie Institution, although really working
practically purely on Observatory routine. I should be most
happy to direct the affairs of the Institution on this basis and
as I stated to you orally, should be ready to waive any increase
in my salary until July 1st, if I should be appointed Director
at this time.

With best wishes for the improvement of your con-

dition, and the greatest sympathy for it.

Very truly yours,

H.B.V.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

February 16, 1905.

Dear Dr. Harper:

Herewith I enclose a draft of the letter you requested me to write to Mr Yerkes, which you might make the basis of a letter you yourself would send to him. I presume that it could be cut down to very good advantage at points which will readily suggest themselves to you.

I very much doubt whether this letter will bring an affirmative response, but most earnestly hope that it may. I have an idea that possibly some of our English friends could bring a little pressure upon Mr Yerkes, and I plan to write Professor Turner to see if he thinks he could use some influence in the matter. In a recent letter to Sir William Huggins, I hinted at the same thing, though I did not quite venture to ask him, the President of the Royal Society, to intervene in any direct way.

As arranged by telephone this morning, I expect to call at your house at eleven o'clock to-morrow morning, the 17th, for the interview suggested in your kind letter of the 15th. Hoping that this will find you in a better degree of physical comfort than heretofore, and with the greatest sympathy of myself and of all ^{at} the Observatory, I am

Very truly yours,

Edwin B. Frost

E.B.F.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

February 16, 1908.

Dear Dr. Hargreaves:

Herewith I enclose a draft of the letter you requested me to write to Mr. Turner, which you might make the basis of a letter you yourself would send to him. I presume that it could be cut down to very good advantage at points which will readily suggest themselves to you.

I very much doubt whether this letter will bring an affirmative response, but most earnestly hope that it may. I have an idea that possibly some of our English friends could bring a little pressure upon Mr. Turner, and I plan to write Professor Turner to see if he thinks he could use some influence in the matter. In a recent letter to Sir William Huggins, I hinted at the same thing, though I did not quite venture to ask him, the President of the Royal Society, to intervene in any direct way.

As arranged by telephone this morning, I expect to call at your house at eleven o'clock to-morrow morning, the 17th, for the interview suggested in your kind letter of the 15th. Hoping that this will find you in a better degree of physical comfort than heretofore, and with the greatest sympathy of myself and of all the Observatory, I am

Very truly yours,

John D. Hargreaves

E.B.T.

Please return to E137

March 3, 1905.

Dr. R. S. Woodward,
President of the Carnegie Institution,
Washington, D.C.

Dear Sir:

I thank you for your letter of the 23rd ult., stating the action of the executive committee on my application for \$2600 for a continuance of the investigation of stellar parallaxes, carried on for the past twenty months by Dr. Schlesinger and Miss Ware under a grant from the Institution. I very much regret that it was not possible to continue the grant; but of course I can appreciate that the policy of the Institution may require a concentration rather than a scattering of its interests. The amount of the appropriations from the Carnegie Institution spent upon this work has been just about \$4500. The Observatory, in furnishing the use of the great telescope for about one-fourth of the time for night observations, has contributed the equivalent of a somewhat greater amount, estimated at \$5000; and there does not seem to be any possibility for the University to provide for the salaries required for the continuance of the work, although the facilities could be still continued. Inasmuch as the work was planned on a basis of a campaign of five years: four years of observations and one year to be wholly devoted to computations and preparations for publication, it therefore does not appear that any appreciable return in published results can be made for the investment of nearly ten thousand dollars

on the part of the Carnegie Institution and the University
of Chicago..

I also thank you for your letter, offering to this
institution for its library the astronomical publications of
the Institution.

Very truly yours,

E. B. Frost

Acting Director.

E.B.F.

March 3rd, 1905.

My dear Mr. Frost:-

Have you had any reply to the letter which we sent to Mr. Hale in reference to certain matters? I refer to the one which was dictated in your presence and taken down by Miss Cobb.

Yours very truly,

W. R. Harper

N.B. I hope you are not being embarrassed by the unfortunate situation. It was very good of you to help us out so nicely the other day when we were getting things in shape. It was very hard for me to work that morning, but your kindly co-operation made not only the result but the work itself exceedingly pleasant.

March 2nd, 1905.

X

My dear Mr. Frost:-

Have you had any reply to the letter which we sent to Mr. Hale in reference to certain matters? I refer to the one which was dictated in your presence and taken down by Miss Cobb.

Yours very truly,

W. R. Harper

N.B. I hope you are not being embarrassed by the unfortunate situation. It was very good of you to help us out so nicely the other day when we were getting things in shape. It was very hard for me to work that morning, but your kindly co-operation made not only the result but the work itself exceedingly pleasant.

March 17th, 1905.

Carnegie piece of work. But I shall not disturb myself about these details. I am perfectly sure that Mr. Hale has intended in all these matters to do exactly the right thing. I should never think

of attributing to him a wrong motive. The case has been a complicated one and there are still some elements that require consideration. I think the points raised in your

letter of March 12th have been cared for as you will see from Mr.

Arnett's letter. The \$920. called for to pay the six months to Mr. Parkhurst and Mr. Fox have been arranged for temporarily, \$420.

of it being charged to Supplies and Expense for the present, but this will be transferred later to another account. Please note this fact.

The Trustees next Monday will elect you Director. I found that the minutes of the last meeting had already been written and distributed when we talked about this matter and so the action could not be incorporated in the last meeting.

I wish there were something we could do for Schlesinger but I do not see anything.

Concerning the arrangement with Mr. Hale, I still feel that the case is not covered by the memorandum to which you refer in your former letter. The arrangement we entered upon was one for an entire year and would close July first. Mr. Hale's resignation comes January first. It was of course distinctly understood that sometime in the future the work might be transferred from the University and treated as a

My dear Professor Brewster:-

I think the points raised in your letter of March 18th have been cared for as you will see from Mr. Arnett's letter. The \$320. called for to pay the six months to Mr. Parkhurst and Mr. Fox have been arranged for temporarily, \$420. of it being charged to Supplies and Expense for the present, but this will be transferred later to another account. Please note this fact.

The Trustees next Monday will elect you Director. I found that the minutes of the last meeting had already been written and distributed when we talked about this matter and so the action could not be incorporated in the last meeting.

I wish there were something we could do for Schlesinger but I

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Concerning the arrangement with Mr. Hale, I still feel that the case is not covered by the memorandum to which you refer in your former letter. The arrangement we entered upon was one for an entire year and would close July first. Mr. Hale's resignation comes January first. It was of course distinctly understood that sometime in the future the work might be transferred from the University and treated as a

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Yours very truly,

W. R. Harper

March 17th, 1903.

Carnegie piece of work. But I shall not disturb myself about these details. I am perfectly sure that Mr. Hale has intended in all these matters to do exactly the right thing. I should never think of attributing to him a wrong motive. The case has been a complicated one and there are still some elements that require consideration. I think you will see from Mr. Armstrong's letter. The \$1000.00 called for to pay the six months to Mr. Parbury and Mr. Fox have been given him. \$450.00 of it being charged to Supplies and Expense for the present, but this will be transferred later to another account. Please note this fact.

The Treasurer next Monday will elect you Director. I found that the minutes of the last meeting had already been written and distributed when we talked about this matter and so the action could not be incorporated in the last meeting.

I wish there were something we could do for Schlesinger but I do not see anything.

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YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

March 4, 1905.

My dear Dr. Harper:

Let me first tell you what a great relief it is to know that you are able to graduate from the hospital, and again to resume your correspondence. Your condition has been the matter of the gravest concern to everyone of us here and we all hope most strongly that the medical treatment now in progress will be effectual.

Replying directly to your inquiry, I have had a number of letters from Mr Hale on the situation. He was very much disturbed by the suggestion that there had been a failure on his part to carry out the conditions of the agreement with you, made last May. He was very much surprised at the idea, for it had not occurred to him that you could entertain such a view. In the course of the correspondence, he sent me a copy of the agreement of last May, one sheet of which I had never seen before. I cannot help feeling that in some way this sheet must have escaped your attention originally, or that it had slipped from your memory at the time of your letter to him, when I was present. I enclose a copy of it. To me, it seems to completely cover the case of the merging of the expedition into the Carnegie Institution's Solar Observatory. I hope you will be inclined to take this view of it, as the document seems to be explicit.

I have been very eager to know of the results of your endeavor to secure the money necessary for paying the salaries of Messrs. Parkhurst and Fox until the new budget

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

CHICAGO, ILL.
JANUARY 1, 1905

March 4, 1905.

My dear Dr. Harper:

Let me first tell you what a great relief it is to know that you are able to graduate from the hospital, and again to resume your correspondence. Your condition has been the matter of the gravest concern to everyone of us here and we all hope most strongly that the medical treatment now in progress will be effectual.

Replying directly to your inquiry, I have had a number of letters from Mr. Hale on the situation. He was very much disturbed by the suggestion that there had been a failure on his part to carry out the conditions of the agreement with you, made last May. He was very much surprised at the idea, for it had not occurred to him that you could entertain such a view. In the course of the correspondence, he sent me a copy of the agreement of last May, one sheet of which I had never seen before. I cannot help feeling that in some way this sheet must have escaped your attention originally, or that it had slipped from your memory at the time of your letter to him, when I was present. I enclose a copy of it. To me, it seems to completely cover the case of the merging of the expedition into the Carnegie Institution's Solar Observatory. I hope you will be inclined to take this view of it, as the document seems to be explicit.

I have been very eager to know of the results of your endeavor to secure the money necessary for paying the salaries of Messrs. Parkhurst and Fox until the new budget

becomes effective; but I was unable to learn from anyone on my visit to the University last week. They are continuing their work for the Observatory, but have not received any salary for January and February. I trust that you can let me have an official word of assurance to give them that the money will be forthcoming very soon.

I regret to say that the executive committee of the Carnegie Institution definitely decided against granting the \$2600 I asked for to carry on the stellar parallax work of Dr. Schlesinger and Miss Ware. Their action is, of course, final; but in my reply (a copy of which I enclose) I thought it my duty to indicate the waste of money involved in the abandonment of the work in its present state.

I have recommended Dr Schlesinger to the authorities of the Allegheny Observatory as a possible successor to Mr Wadsworth. Of course, I should be exceedingly sorry to have him leave here, and have the important work given up; but justice to him requires that he have the assurance of a position that will yield him a salary.

It was not my intention to write you for quite a while yet, because I don't think you ought to be bothered with these things. Your direct inquiry is my only apology.

With kindest regards, I am

Very sincerely yours,

Edwin B. Frost

E.B.F.

becomes effective; but I was unable to learn from anyone on my visit to the University last week. They are continuing their work for the Observatory, but have not received any salary for January and February. I trust that you can let me have an official word of assurance to give them that the money will be forthcoming very soon.

I regret to say that the executive committee of the

Carnegie Institution definitely decided against granting the \$2500 I asked for to carry on the stellar parallax work of Dr. Schlesinger and Miss Wray. Their action is, of course, final; but in my reply (a copy of which I enclosed) I thought it my duty to indicate the waste of money involved in the abandonment of the work in its present state.

I have recommended Dr. Schlesinger to the authorities

of the Allegheny Observatory as a possible successor to Mr. Wadsworth. Of course, I should be exceedingly sorry to have him leave here, and have the important work given up; but just as to him requires that he have the assurance of a position that will yield him a salary.

It was not my intention to write you for quite a while yet, because I don't think you ought to be bothered with these things. Your direct inquiry is my only apology. With kindest regards, I am

Very sincerely yours,



G. E. Hale

It is understood that the proposed astronomical work on Mt. Wilson for which \$13,000 is available up to December next, with the understanding that \$30,000 will be appropriated for the year beginning January 1st, 1905, shall be done under the auspices of the University of Chicago, and under the title of The University of Chicago Expedition for Solar Research.

It is understood that the University contributes to this work (1) the salary of Mr. Hale, (2) the salary of Mr. Ellerman, (3) the use of certain instruments needed at the observatory, (4) certain use of the shops for construction, and (5) certain work by the instrument maker Johannesen.

It is understood that in case the Carnegie Institution decides, as a result of a new gift from Mr Carnegie, to establish a Solar Observatory of their own, this work will naturally be replaced by such an observatory.

It is understood that the proposed astronomical

work on Mt. Wilson for which \$18,000 is available up to
December next, with the understanding that \$30,000 will
be appropriated for the year beginning January 1st, 1906,
shall be done under the auspices of the University of Chicago,
and under the title of The University of Chicago Expedition
for Solar Research.

It is understood that the University contributes
to this work (1) the salary of Mr. Hale, (2) the salary of
Mr. Kilsner, (3) the use of certain instruments needed at
the observatory, (4) certain use of the shops for construction,
and (5) certain work by the instrument maker Johannes
seen.

It is understood that in case the Carnegie Institution
decides, as a result of a new gift from Mr. Carnegie,
to establish a Solar Observatory of their own, this work
will naturally be replaced by such an observatory.

MAR 25 1905

✓
My dear Doctor Harper: It was a great pleasure to receive your note of the 20th and learn that you are gaining so much in health. This letter does not refer to the matters on which I intended to write you. But I understand that it has been brought to your attention, either by Mr. Heckman, or by the Trustees, "in the hope that your resourcefulness might offer a solution". You will never be able to realize how much the officers of the University owe to your successful guidance. Even the blessed Trustees seem to have difficulties in keeping things straight in your absence [See Appendix I]. Of course the members of the faculties always need your genial scepter in sight to keep them in order.

Less my point of view might be misunderstood, I am troubling you to read this letter, though I will write it so that shall not require a reply from you. In re Director's House: Of course I (we) think we ought to occupy it, as a matter of justice to the official guests

who have been entertained by the Director.
If we go into it, we expect to stay for
20 years, health and ability to fill my
position being assumed. Now it would
seem logical to have the repairs and
changes made in it before or more in,
rather than at intervals and after
intermittent supplications to the Trustees.
In occupying a house permanently, at
all seasons, more things are required than
for a tenancy of a few months in summer.
Now we want the attic finished off
so that we can put our guests there. As
it is, we have no more available
sleeping room in our present house.
The roof also leaks; the furnace
broke down two days after you left;
some of the floors were very badly marred
when Mr. Stalis' heavy things were moved
out; we need to have the refrigerator
closed in, instead of standing on the
back porch; the paper needs renewal
in several rooms - conspicuous after the
removal of Mr. H.'s furniture & pictures.
All told, about \$700 would be
needed for what Mr. Maclean (and
I think Mr. Heckman) regarded as

EDWIN B. FROST,
YERKES OBSERVATORY,
WILLIAMS BAY, WIS.

Reasonable desires on our part, and as naturally ~~would~~ granted to reputable tenants.

Now of course I cannot pay 9% rental and also pay for such repairs, particularly before occupying a house. The trustees regard themselves as bound hand & foot to make the house yield the regular investment rate, and then have all the balance of the 9% go to sinking fund, with no allowance, apparently, for depreciation or repairs. However, by stretching their consciences, they think that \$200 might be given for the purposes named.

The situation is embarrassing to me and doubtless regretted by them, certainly regretted by Mr. Heckman. I cannot fail to see the humorous side of the situation; for the earning power of the Trustees while discussing the matter was probably much more than the amount involved. Further, that house cost about \$6200. and has brought in so far about \$4500. in rental for 8 years. It thus must be one

EDWIN B. FROST,
YERKES OBSERVATORY,
WILLIAMS BAY, WIS.

of the best laying geese of all in the flock of the University's investments. If it should refuse to lay for a year, on account of lack of some spring tonic, then ^{near} the whole amount involved would be lost; But the repairs would be more, rather than less necessary a year from now. With proper

equivalents assured me, I am prepared to advance the money myself.

Now please don't bother yourself in the least about this matter; I must write so that my point of view shall not be misunderstood, and for your vicarious entertainment. I shall make proposals and counterproposals to the Trustees, and in the fulness of time some settlement, unsatisfactory to landlord and tenant, can doubtless be cheerfully reached.

[Appendix I. Messrs. Parkhurst & Fox have not yet received their salary checks. Mr. Hickman telephoned me yesterday that he understood that the Trustees voted it \$420. (permanently) out of S+E; and out of Mr. Stahli's \$500. gift for Mr. Bunker's salary! * But this, too, will be

* Already straightened out, Mr. Hickman telephoned.

EDWIN B. FROST,
YERKES OBSERVATORY,
WILLIAMS BAY, WIS.

don't be straightened out in a few days.

There are no further Appendices.

With the kindest regards and the most earnest hopes for your steady recovery, by Mrs Frost and myself, and all here,

Most sincerely yours,

Edwin B. Frost

Dear Mr. Frost,
I have no further information
to send you at present.
The next month I hope to
send you some of the first
results of my work.
Very respectfully,
Edwin Frost

The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

VERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

July 25, 1905.

Frost

✓

Dear Dr Harper:-

Pursuant to your letter of the 21st, I have notified Mr Stillhamer that he has been appointed as substitute for Mr Fox. I was of course unable to inform him as to the rank of instructor, which I recently referred to you.

I shall be glad to arrange for the visit of the hundred and twenty-five working girls from Racine at noon to-morrow. It will not interfere at all with our work, and I shall always be ready to admit such parties to whom you think it is desirable for us to show such attention. It would generally be better to have the hour between one and two o'clock, as the engineer is ordinarily at home for dinner between twelve and one.

The party of one hundred and forty from the University seemed to enjoy themselves on their visit here last Saturday, and I hope the trip will be advantageous both for the University and the Observatory.

Very sincerely yours,

Edwin B. Frost

E.B.F.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.
The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

July 25, 1905.

Dear Dr Harper:-

Pursuant to your letter of the 21st, I have notified Mr Stillman that he has been appointed as substitute for Mr Fox. I was of course unable to inform him as to the rank of instructor, which I recently referred to you.

I shall be glad to arrange for the visit of the hundred and twenty-five working girls from Racine at noon to-morrow. It will not interfere at all with our work, and I shall always be ready to admit such parties to whom you think it is desirable for us to show such attention. It would generally be better to have the hour between one and two o'clock, as the engineer is ordinarily at home for dinner between twelve and one.

The party of one hundred and forty from the University seemed to enjoy themselves on their visit here last Saturday, and I hope the trip will be advantageous both for the University and the Observatory.

Very sincerely yours,

John D. Rock

E.B.F.

October 8, 1905

Wednesday
11:12

✓

My dear Dr. Harper:

I appreciate greatly your kind willingness to grant me an interview this week if conditions permit. Wednesday will be more convenient to me than Tuesday.

The points I should like to bring up are the following:

1. A tentative consideration of the possibility of the retention of the Snow telescope by the Carnegie Institution. I have not mentioned this even to Mr. Hale, and the matter will need most diplomatic handling. I would like to have this purely confidential between us.
2. The attitude of the University toward having the Carnegie Institution publish, under the auspices of the C. I., results obtained by our observers when no other subvention has been received from the Carnegie Institution.
3. Adjustment of a certain account which the Auditor said you had told him you would provide for.

U. S. FROST,
OBSERVATORY,
KAMA BAY, WIS.

amount was \$420., left over from last year.† A note from yourself to the Auditor would doubtless straighten the matter out at once.

4. Minor appointments at the observatory and report on plans.

These matters can be disposed of quite promptly, I am sure, if your condition on Wednesday should permit us to have a little talk. Miss Cobb will doubtless be kind enough to advise me of the hour.

We all wish you were up here in our astronomical circle again in this wonderful autumnal weather.

Mrs. Frost adds her warmest regards to mine, to you and yours.

Most sincerely yours,

Edwin B. Frost

† Arranged for in your letter of March 17th (1900) to me.

I am very glad to hear from you
and to hear from you again. I am
very glad to hear from you again.

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and to hear from you again. I am
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very glad to hear from you again.

Extract from a letter from Prof. F. R. Moulton to E. B. Frost
dated May 5, 1905.

COPY.

The new order is going to prevent our doing our regular undergraduate work. We regularly give two quarters of Descriptive Astronomy, three of observatory work, three of Analytical Mechanics, and two of Celestial Mechanics, all open to undergraduate students. Of the ten majors, it will be possible to give only six if we both take vacation, and only eight if neither of us takes vacation. This is the situation cutting out all the most distinctive work that we do.

(Signed) F. R. Moulton.

The new order is going to prevent our regular undergraduate work. We regularly give two masters of Descriptive Astronomy, three of observational work, three of Analytical mechanics, and two of Celestial mechanics, all open to undergraduate students. Of the ten majors, it will be possible to give only six if we both take vacation, and only eight if neither of us takes vacation. This is the situation cutting out all the most distinctive work that we

do.

(Signed) F.R. Moulton.

Astronomical Department.
NUMBER OF STUDENTS.

July 1901 - 1902.

Descriptive Astronomy	30
" "	12
Analytical Mechanics I	15
" " II	9
Celestial Mechanics	6
Spherical and Practical Astronomy	4
Observatory work	8
Dynamics	
Celestial Mechanics II	6
Absolute perturbations II	3-
Lunar theory	3-
Attraction and figures of heavenly bodies	2-
Celestial Mechanics (summer)	7
	<hr/>
	105

1902 - 1903.

Descriptive Astronomy	35
" "	10
Analytical Mechanics I	12
" " II	10
Spherical and Practical Astronomy I	5
Spherical and Practical Astronomy II	3-
Observatory work	5
Astron. Optics	3-
Celestial Mechanics I	6
" " II	6
Astronomical Ephemerides	3-
Problem of 3 Bodies	6
System of n bodies	2-
Absolute perturbations I	2-
	<hr/>
	110

1903 - 1904.

Descriptive Astronomy	35
" "	42
Analytical Mechanics I	12
" " II	9
Spherical and Practical Astronomy	4
Observatory work	7
Celestial Mechanics, I	6
" " II	6
Selected chapters of Celestial Mechanics	8
	<hr/>
	129

1904 - 1905.

Descriptive Astronomy	35
" "	51
Introduction to Geodesy	2-
Analytical Mechanics, II	8
Spherical and Practical Astronomy	4
Observatory work	13
Celestial Mechanics, I	5
" " II	8
System of n bodies	3-
Lunar theory	2-
Elementary Mechanics	13
Problem of 3 Bodies	8
Spherical and Pract. Ast. II	7
	<hr/>

159

"Matters are now developing so that I must ask the University authorities to provide more adequate quarters and more numerous instruments to handle intelligently classes of the size we are having now. I do not think that I am overstating the case if I beg you to refer this matter to the proper authorities. In all other departments large classes are properly cared for with the exception of our department. The buildings in use are too limited both for the handling of the six-inch equatorial and the demonstrations necessary in the Meridian room. Professor Moulton, during the summer quarter, will have fully 45 members in his class; at the same time I shall have an observatory class of some twelve members, who will meet in the observatory every clear night and make it next to impossible for Professor Moulton to use the dome for his class. Having been intrusted by the President with the instruction in Astronomy at the University, I feel it my duty to inform you of the utter inadequate conditions on the campus, and I ask that the attention of the University authorities be directed to the present state of conditions. A conference should be held to see what improvements are most urgently required and definite plans outlined for a permanent and adequate Students' Observatory." X X X

"I plan for the Fall Quarter a course in descriptive Astronomy to avoid a congestion of the present form. Moreover I want to demonstrate to the University authorities that this present tide of interest for Astronomy can be made to stay if properly attended to. In this connection I want to say that President Harper's idea that we offer more courses than the students care for is an erroneous one. I do not believe any more that two instructors are too many; in fact, I hope to show that we shall need before long a third one, anyhow an assistant for the observatory. I shall, and so will Mr Moulton, consider it a favor on your part if you will call President Haper's attention to the fact that from Summer 1904 to Spring 1905 we have had ¹⁵⁹ ~~more than 120~~ registered in the department."

Extract from a letter of Prof. Lane to E. B. Frost
dated May 4, 1905.

"Matters are now developing so that I must ask the University authorities to provide more adequate quarters and more numerous instruments to handle intelligently classes of the size we are having now. I do not think that I am overstating the case if I beg you to refer this matter to the proper authorities. In all other departments large classes are properly cared for with the exception of our department. The buildings in use are too limited both for the handling of the six-inch equatorial and the demonstration necessary in the Meridian room. Professor Montion, during the summer quarter, will have fully 45 members in his class; at the same time I shall have an observatory class of some twelve members, who will meet in the observatory every clear night and make it next to impossible for Professor Montion to use the dome for his class. Having been intrusted by the President with the instruction in Astronomy at the University, I feel it my duty to inform you of the utter inadequate conditions on the campus, and I ask that the attention of the University authorities be directed to the present state of conditions. A conference should be held to see what improvements are most urgently required and definite plans outlined for a permanent and adequate students' Observatory. X X X

"I plan for the Fall Quarter a course in descriptive Astronomy to avoid a congestion of the present form. Moreover I want to demonstrate to the University authorities that this present tide of interest for Astronomy can be made to stay if properly attended to. In this connection I want to say that President Harper's idea that we offer more courses than the students care for is an erroneous one. I do not believe any more that two instructors are too many; in fact, I hope to show that we shall need before long a third one, anyhow an assistant for the observatory. I shall, and so will Mr. Montion, consider it a favor on your part if you will call President Harper's attention to the fact that from Summer 1904 to Spring 1905 we have had more than 100 registered in the department."

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

May 23, 1905.

Mr. Judson
My dear Dr. Harper:

file under Frost.

It is my duty to call your attention to the very serious condition existing in regard to instruction at the University in the astronomical department under the plan proposed for the fiscal year about to begin. I have delayed sending this letter until your return from your recent trip to New York.

My compliance with the suggestion of yourself and Professor Judson when I was at the University in February, - that the astronomical department should closely co-operate with the mathematical department in instruction during this year *, was extended considerably further than I had meant. I agreed that it seemed to me feasible that the mechanics should be cared for by the astronomical department, as is done in many other institutions; but I did not commit myself further than this. It appears now, as a matter of fact, that the astronomical department has hitherto provided the instruction in analytic mechanics, - a fact with which I should have been familiar if the care of the department had not been new to me. As I understand it, the arrangements which were prescribed to Messrs. Laves and Moulton by the University authorities practically amount to this: while the mathematical department loses one man, his work is, in effect, taken over by the astronomical department, so that the burden falls upon it. That this additional work in mathematics will displace quite a part of the excellent work that has hitherto been carried on by Messrs Laves and Moulton, may be seen from an

* which will perhaps be known in the future records of the University as the "year of stringency".

THE UNIVERSITY OF CHICAGO

1. The first part of the paper is devoted to a general discussion of the problem of the distribution of the elements of a finite group. It is shown that the distribution of the elements of a finite group is determined by the structure of the group and the structure of the field over which the group is defined. The second part of the paper is devoted to a detailed study of the distribution of the elements of a finite group. It is shown that the distribution of the elements of a finite group is determined by the structure of the group and the structure of the field over which the group is defined. The third part of the paper is devoted to a detailed study of the distribution of the elements of a finite group. It is shown that the distribution of the elements of a finite group is determined by the structure of the group and the structure of the field over which the group is defined.

extract I enclose from a recent letter from Mr Moulton. I also enclose an extract from a letter which I received^{at} about the same date, from Mr Laves, and I desire to emphasize fully the needs of the department to which he refers. I think the administration has hardly realized the amount of work that has been done by the department at the University, and I enclose as an exhibit a statement prepared by Mr Laves showing that the number of the students taught in the department has increased by more than fifty per cent in the past four years; so that during the present year, over 150 students have been taught.

It is a matter of the utmost urgency that a suitable students' observatory should be provided, with which should be connected rooms for teaching, a place for a departmental library, and offices for the instructors.

Progress in developing plans for a joint building with the mathematical department have not advanced as rapidly as I could wish, and I am inclined to feel that it may be advantageous to have the astronomical building and observatory separate from any other department; although I should not wish to recommend this until the matter had been very fully discussed by all concerned.

Very sincerely yours,

Edwin B. Frost

E.B.F.

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... would wish, and I am inclined to feel that it may be advantageous
... to have the mathematical building and observatory separate from
... any other department; although I should not wish to recommend this
... until the matter has been very fully discussed by all concerned.

Very sincerely yours,



C. F. S.

to do the work itself, but if the University is unable for lack of means to do this work, it would be manifestly wrong to deprive the scientific public of the results, and we would therefore be willing November 2nd, 1906, to people to do the printing, with the understanding that in some proper form acknowledgment should be made and Professor E. B. Frost's acknowledgment might be included on the title page. Williams Bay, Wis.

Yours very truly,
My dear Mr. Frost:-

You will kindly pardon my delay in replying to the points suggested in our recent interview. I have desired to have time to talk with the committee. We do not think that we ought to make a proposition to the Carnegie people to turn over the Snow telescope, but if they wish to make us a proposition to turn it over to them, with the understanding that there shall be an equivalent, I am quite sure they would find us ready to consider the proposition favorably.

In the case of work already undertaken by the Carnegie Institution in the way of printing results, nothing further is to be said. In the case of new investigations to be treated in this way, it is proposed that we should consider each on its merits, and that in each case the University undertake if possible

November 2nd, 1905.

Professor E. B. Frost,

Williams Bay, Wis.

My dear Mr. Frost:-

You will kindly pardon my

delay in replying to the points suggested in our recent interview. I have desired to find time to talk with the committee. We do not think that we ought to make a proposition to the Carnegie people to turn over the Snow telescope, but if they wish to make us a proposition to turn it over to them, with the understanding that there shall be an equivalent, I am quite sure they would find us ready to consider the proposition favorably.

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Yours very truly,

~~H. P. Johnson~~

W. R. Harper

to do the work itself, but if the University is unable
for lack of means to do this work, it would be manifestly
wrong to deprive the scientific public of the results,
and we would therefore be willing to allow that Carnegie
people to do the printing, with the understanding that
in some proper form acknowledgment should be made and
with the hope that this acknowledgment might be included
on the title page. Wis.

Yours very truly,

My dear Mr. Frost:-

You will find enclosed my

delay in replying to the points suggested in our
recent interview. I have desired W. R. Harper
to talk with the committee. We do not think that we
ought to make a proposition to the Carnegie people to turn
over the Snow telescope, but if they wish to make us a
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+ 137

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

August 24, 1906.

August 25th, 1906.

Mr. Edwin B. Frost,

Yerkes Observatory,

Williams Bay, Wisconsin.

Dear Mr. Frost:-

I beg to acknowledge your favor
of the 24th inst. containing a statement as to the
payments made to the special fund. You are right in
thinking that I should wish this for my Convocation
statement.

Very truly yours,

H. P. Jackson

August 25th, 1900.

Mr. Edwin B. Frost,
Yerkes Observatory,
Williams Bay, Wisconsin.

Dear Mr. Frost:-

I beg to acknowledge your favor
of the 24th inst., containing a statement as to the
payments made to the special fund. You are right in
thinking that I should wish this for my Convocation
statement.

Very truly yours,

H. P. Judson

Dr. H. P. Judson,
Acting President

+ 137

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

August 24, 1906.

Dr. H. P. Judson,
Acting President,
University of Chicago.

Dear Mr. Judson:

Within the past month payments have been made of subscriptions to the special fund raised for the current expenses of the Observatory for the fiscal years 1905-6 and 1906-7:

Mr. Martin A. Ryerson	\$250.00
Mr. N. W. Harris	250.00
Mr. C. L. Hutchinson	150.00

I think that acknowledgment has not been made in the President's Quarterly Statement for these three gifts, as I only sent in the names of those from whom cash was actually in hand. I presume you will wish to include these in your forthcoming statement.

Very truly yours,

Edwin B. Frost

E.B.F.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CARL ROBERT
ASTORUS CHICAGO

August 21, 1905.

Mr. J. J. ...

President,

University of Chicago.

Dear Mr. ...

Within the past month payments have been made of
subscriptions to the special fund raised for the current expenses of the
Observatory for the fiscal years 1905-6 and 1906-7.

Mr. Martin A. ...

Mr. ...

Mr. ...

I think that acknowledgment has not been made in the President's
monthly statement for these three gifts, as I only sent in the names of
those from whom cash was actually in hand. I presume you will wish to
include these in your forthcoming statement.

Very truly yours,

John D. Rockwell

J. J. ...

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

February 4, 1907.

February 13th, 1907.

My dear Professor Frost:-

Your favor of the 4th inst. was received but not answered because of my absence in the east. It seems to me fairly clear on the whole that our original plan for a temporary structure here is the best. We cannot for some time decide just what we want in the way of a permanent building, and the small cost of this temporary structure would make it, it seems to me, practical to carry it on for some years. The question of location we can reserve for the present until we have a little additional light which I am sure is coming pretty soon.

Very truly yours,

H. P. Johnson

February 13th, 1907.

My dear Professor Frost:-

Your favor of the 4th inst.

was received but not answered because of my absence in the east. It seems to me fairly clear on the whole that our original plan for a temporary structure here is the best. We cannot for some time decide just what we want in the way of a permanent building, and the small cost of this temporary structure would make it, it seems to me, practical to carry it on for some years. The question of location we can reserve for the present until we have a little additional light which I am sure is coming pretty soon.

Very truly yours,

H. P. Judson

Dear Mr. Judson:

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

February 4, 1907.

Dear Mr. Judson:

If it was a question of only providing a single pier for an observatory dome on the third story of a building, the observatory part could be associated with the recitation room part of the mathematical-astronomical building. But, four piers would be called for, and the largest one would have to be more than 20 feet square at the base. Such piers greatly diminish the usefulness of the building, because they would consume a great amount of space and light from the structure below.

A location on the Midway front would naturally be very attractive, assuring a good horizon south. Unfortunately, however, for practical astronomical work, a northern horizon is quite essential, as stars must be observed when they cross the meridian below the pole, as well as when they pass above the pole. A location on the Midway which would insure a clear line of sight to within 20 degrees of the northern horizon, might make a very satisfactory situation.

A situation in a botanical garden for the observatory would be as nearly ideal as could be secured in the city; provided the garden was not over half a mile from the University quadrangles. On account of the night work, it seems to me that the observers, particularly young women, ought not to have to go very far from the Observatory to their rooms. Hence, I think the officers of the department would agree that if the observatory had to be located too far away from the dormitories and recitation building, the next choice would be a situation on the Midway which should at the same time preserve a fair

northern horizon.
The third choi

The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

February 4, 1907.

Dear Mr. Johnson:

It is a question of only providing a single pier for an observatory dome on the third story of a building, the observatory part could be associated with the ventilation room part of the astronomical-observatory building. But four piers would be called for, and the largest one would have to be more than 30 feet square at the base. Such piers greatly diminish the usefulness of the building, because they would consume a great amount of space and light from the structure below.

A location on the Midway Street would naturally be very attractive, ensuring a good horizon south. Unfortunately, however, for practical astronomical work, a northern horizon is quite essential, as stars must be observed when they cross the meridian below the pole, as well as when they pass above the pole. A location on the Midway which would insure a clear line of sight to within 30 degrees of the northern horizon, might make a very satisfactory situation.

A situation in a botanical garden for the observatory would be as nearly ideal as could be secured in the city; provided the garden was not over half a mile from the University quadrangles. On account of the night work, it seems to me that the observers, particularly young women, ought not to have to go very far from the Observatory to their rooms. Hence, I think the officers of the department would agree that if the observatory had to be located too far away from the dormitories and recitation building, the next choice would be a situation on the Midway which should at the same time preserve a fair

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

northern horizon.

The third choice would be to have the high piers, and devote the upper floors of the combined mathematical-astronomical building to observing rooms and domes. If space and expense are not serious considerations, tall piers are not of themselves objectionable. In fact it is desirable that telescopes should be at some distance from the ground. The center of motion of the 40-inch telescope here is 60 feet above the ground, and the base of the revolving dome is 52 feet from the ground. The base of the revolving domes of the other two smaller telescopes is 50^{feet} from the ground. Of course this elevation was regarded an advantage rather than a disadvantage at the location at ^{Lake} Geneva, where there was an abundance of land and no interference with the light and space of necessary rooms.

I shall hope to be able to attend any sessions of the committees concerned, if my presence is desired and if I receive sufficient notification in advance.

Very truly yours,

Edwin B. Frost

E.B.F.

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
YERKES OBSERVATORY

Dear Sir:

The first choice would be to have the high place, and devote the upper floors of the existing astronomical building to observing rooms and offices. It seems that the expense was not serious consideration, but the plan was not of themselves objectionable. In fact it is desirable that telescopes should be at some distance from the ground. The center of motion of the 40-inch telescope here is 50 feet above the ground, and the base of the revolving dome is 25 feet from the ground. The base of the revolving domes of the other two smaller telescopes is 50 feet from the ground. Of course this elevation was regarded as an advantage rather than a disadvantage at the location at Geneva, where there was an abundance of land and no interference with the light and space of necessary rooms. I shall hope to be able to attend any session of the committee concerned, if my presence is desired and if I receive sufficient notification in advance.

Very truly yours,

W. W. Wright

W. W. Wright

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

9
August 2, 1907.
August 20th, 1907.

My dear Mr. Frost:-

Your favor of the 2nd of August reached me in Canada. As my being at the Lake on the 14th was out of the question, I did not answer until my return to the city. I am just back. I hope that you had a successful time and a large attendance.

With sincere regards for Mrs. Frost as well as yourself, I am

Very truly yours,

H. P. Johnson

Professor E. B. Frost,
Williams Bay, Wis.

August 30th, 1907.

My dear Mr. Frost:-

Your favor of the 2nd of August reached me in Canada. As my being at the Lake on the 14th was out of the question, I did not answer until my return to the city. I am just back. I hope that you had a successful time and a large attendance.

With sincere regards for Mrs. Frost as well as

yourself, I am

Very truly yours,

H. P. Johnson

Professor E. B. Frost,
Williams Bay, Wis.

My dear Dr. Judson

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

August 2, 1907.

My dear Dr. Judson:

It has been my plan to appropriate one evening this summer of the time of the large telescope for the use of friends of the University, particularly of some of the Trustees resident here or nearby. It has seemed to me that it might be of interest to other members of the board to visit the Observatory on this occasion, and Mr. Hutchinson agrees heartily with this view. Now it would be particularly desirable to have the pleasure of your company at this time. From the astronomical point of view, which means the age of the moon and position of celestial objects, the best date will be Wednesday, August fourteenth. I very much hope that this date will be convenient to you.

In going over the list of gentlemen on the board with Mr. Hutchinson, it seems possible that as many as eight might come, provided other engagements do not interfere. Arrangements will be made for their entertainment after they have been heard from. In case the evening should be cloudy we shall arrange to have various exhibits of the work in

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

000000

August 2, 1917.

My dear Mr. Johnson:

It has been very pleasant to appreciate one evening
this summer of the time of the large telescope for the use of
friends of the University. Particularly of course of the Yerkes
resident here or nearby. It has seemed to me that it might be
of interest to other members of the board to visit the Obser-
vatory on this occasion, and Mr. Hutchinson agrees heartily with
this view. Now it would be particularly desirable to have the
pleasure of your company at this time. From the astronomical
point of view, which means the age of the moon and position of
celestial objects, the best date will be Wednesday, August four-
teenth. Very much more than this date will be convenient to

Yours,

In going over the list of gentlemen on the
board with Mr. Hutchinson, it seems possible that as many as
eight might come, provided other engagements do not inter-
fere. Arrangements will be made for their entertainment after
they have been heard from. In case the evening should be
cloudy we shall arrange to have various exhibits of the work in

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

Chicago

progress and already accomplished, which might be of interest.

Some of the other friends of the University, resident about the Lake, will probably also be invited to be present, but not in such numbers as to make any confusion.

It would give much pleasure to Mrs. Frost and myself if you and Mrs. Judson could visit us at this time and become more closely acquainted with the Observatory and its workers.

Very truly yours,

Edwin B. Frost

E. B. F.

The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER
YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CHICAGO, ILL.
JAN. 10, 1900

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The University of Chicago
FOUNDED BY JOHN D. ROCKEFELLER

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CABLE ADDRESS
ARCTURUS CHICAGO

7
May 23, 1908.

My dear President Judson:--

We have just heard from Mrs. Judson that you will be unable to come here for this week end. As I said in my letter to you, next week Saturday would be, in some respects, a very good time for you to inspect the Observatory, as the various departments of work will be on exhibition for the visit of the Chaos Club. The Chicago members of the club, which includes as members, Professors Chamberlin, Coulter, Lillie, Michaelson, and a number of others, will come via Harvard, Ill., on the 9:00 o'clock train on Saturday morning, ^{30th}. I hope as many as twenty members may be present, and it will be a great pleasure to all if you can join the party. We shall lunch at the Harvard Camp, across the lake from the Observatory, whither we will be transported by steamer from the Fontana pier, and the steamer will bring us later to the Observatory for the afternoon. The party will return at 5:40, reaching Chicago at about 8:00 ^{p.m.}.

Should you find it impossible to spend Sunday, we should be very much pleased if you could come and return with the party. I understand from Mrs. Judson's letter that you will not reach Chicago until about the 28th, so I shall not look for any earlier notice as to whether you can give us the pleasure of seeing you on the 30th.

Sincerely yours,

Edwin P. Frost

EBF

YERKES OBSERVATORY
WILLIAMS BAY, WIS.

CHICAGO, ILLINOIS

May 23, 1908.

My dear President Johnson:--

I have just heard from Mrs. Johnson that you will be unable to come here for this week end. As I said in my letter to you, next week Saturday would be, in some respects, a very good time for you to inspect the Observatory, as the various departments of work will be on exhibition for the visit of the Chicago Club. The Chicago members of the club, which includes as members, Professors Chamberlin, Coulter, Lillie, Michaelson, and a number of others, will come via Harvard, Ill., on the 9:00 o'clock train on Saturday morning. I hope as many as twenty members may be present, and it will be a great pleasure to all if you can join the party. We shall lunch at the Harvard Camp, across the lake from the Observatory, whither we will be transported by steamer from the Fontana pier, and the steamer will bring us later to the Observatory for the afternoon. The party will return at 5:40, reaching Chicago at about 8:00.

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Sincerely yours,

Wm. C. Cress

I rest

The University of Chicago

Perkes Observatory
WILLIAMS BAY, WIS.

July 28, 1917

CABLE ADDRESS
ARCTURUS CHICAGO

Print
Mr. David A. Robertson,
Secretary to the President,
University of Chicago.

Dear Mr. Robertson:

1. I have written to Professor Strömberg at Copenhagen that authorization will probably be given for his lecture on "The Cosmogonic Position of the Comets" at the middle or end of October. This date is probably quite uncertain as travel from northern Europe is so much deranged.

2. Referring to the proposed luncheon for the members of the French Scientific Mission at the University, I hope that the invitation will also be extended to any members of the Italian Military Commission who may be able to be present. (Here, long distance call from Mr. Robertson intervened.) Confirming our telephonic conversation, I will say that Lieut. Giorgio Abetti of the Italian Military Commission, formerly for six months Research Assistant at this Observatory, has advised me that he expects to be in Chicago next week. He states: "I hope almost sure to be able to come to Williams Bay, which is one of my greatest wishes, but I must follow the orders of the Chief of the Commission, Major Fabry *****" It is thus evident that Professor Abetti will be with Professor Fabry, and I trust that you will be able to extend the invitation to any other Italian officials that are connected with the scientific

July 28, 1917

Office of the President
University of Chicago

Mr. David A. Robertson,
Secretary to the President,
University of Chicago.

Dear Mr. Robertson:

1. I have written to Professor G. B. S. at
Copenhagen that authorization will probably be given
for his lecture on "The Cosmogonic Position of the
Comets" at the middle or end of October. This date
is probably quite uncertain as travel from northern
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six months Research Assistant at this Observatory, has
advised me that he expects to be in Chicago next week.
He states: "I hope almost sure to be able to come to
Williams Bay, which is one of my greatest wishes, but
I must follow the orders of the Chief of the Commission.
Major Fabry ***** It is thus evident that Professor
Abetti will be with Professor Fabry, and I trust that
you will be able to extend the invitation to any other
Italian officials that are connected with the scientific

or military missions,-- all of which you proposed to do through Major Fabry, in your conversation.

I am expecting that Major Fabry will also come to see us at Williams Bay, as he promised to do if in any way possible.

Very truly yours,

EBF

Frost
Edwin B. Fabry

Professor Bannant will
come with me for the
luncheon on Monday

The University of Chicago

Perkes Observatory
WILLIAMS BAY, WIS.

August 2, 1917

CABLE ADDRESS
ARCTURUS CHICAGO

Dear Mr. Robertson:

I wish, as one of the passengers, to express my appreciation of the courtesies you extended to us and to the French Scientific Mission at the luncheon on Monday. I thought the affair went off very satisfactorily in spite of the very short time you had to arrange it.

I also wish to communicate to you the expression of regret from Professor Crew that he was unable to attend. He writes me that he was ill and unable to leave his bed. The telegram he sent to the Quadrangle Club, expressing his regrets, which was addressed to me at the Quadrangle Club and should have been delivered by 10 a.m., was returned to him on the following day undelivered. It seems to me that in justice to Professor Crew I should communicate this fact to you.

Very truly yours,

Edwin B. Frost

Mr. David A. Robertson,
Secretary to the President,
The University of Chicago.

EBF

The University of Chicago

Office of the President
The University of Chicago

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Very truly yours,

Mr. David A. Robertson,
Secretary to the President,
The University of Chicago.

BBB

XVIII

The University of Chicago

CHICAGO, ILLINOIS

Office of the President

C O P Y

February 19, 1924.

Dear Harold:

In pursuance of a suggestion made by you and approved by the President, I have been sending letters to all Heads of Departments asking to be kept informed of any emergency that might arise in the health or affairs of members of their departments. I have just learned that Professor Frost is about to face the long expected operation upon his eye, which it is hoped may restore his sight, and that this is likely to cost \$1500., quite apart from incidental expenses of travel and care. I believe the University made a grant of \$1000. to Dr. Frost when he was first overtaken with his eye trouble two years ago. This has been exhausted in examinations and the necessary travel incident to consulting them. I am suggesting to the President, that he might confer with you about the case of Professor Frost, to see whether something further cannot be done by the University, or by his friends, to help him in this great crisis.

Truly yours,

E. J. Goodspeed (signed)

Mr. Harold H. Swift,
Union Stock Yards,
Chicago, Illinois.

EJG:AS

XVIII

The University of Chicago

CHICAGO, ILLINOIS

Office of the President

February 19, 1924.

My dear Dr. Burton:

I have a little talk with Professor
and Mrs. Frost, on the basis of which I have
written Mr. Swift the enclosed statement. I
hope it will have your approval.

Truly yours,

EJG Goodspeed

Dr. Ernest D. Burton,
Commodore Hotel,
New York City.

EJG:AS
Encl.

*EJG Please follow through as
much as possible. H. H. S. favor
granting from \$1000. (if he needs it
to be paid when & if he finds
it possible. EJG
Can you tell me to which
B-?*

