



Hunt Institute for Botanical Documentation
5th Floor, Hunt Library
Carnegie Mellon University
4909 Frew Street
Pittsburgh, PA 15213-3890
Telephone: 412-268-2434
Email: huntinst@andrew.cmu.edu
Web site: www.huntbotanical.org

The Hunt Institute is committed to making its collections accessible for research. We are pleased to offer this digitized item.

Usage guidelines

We have provided this low-resolution, digitized version for research purposes. To inquire about publishing any images from this item, please contact the Institute.

Statement on harmful and offensive content

The Hunt Institute Archives contains hundreds of thousands of pages of historical content, writing and images, created by thousands of individuals connected to the botanical sciences. Due to the wide range of time and social context in which these materials were created, some of the collections contain material that reflect outdated, biased, offensive and possibly violent views, opinions and actions. The Hunt Institute for Botanical Documentation does not endorse the views expressed in these materials, which are inconsistent with our dedication to creating an inclusive, accessible and anti-discriminatory research environment. Archival records are historical documents, and the Hunt Institute keeps such records unaltered to maintain their integrity and to foster accountability for the actions and views of the collections' creators.

Many of the historical collections in the Hunt Institute Archives contain personal correspondence, notes, recollections and opinions, which may contain language, ideas or stereotypes that are offensive or harmful to others. These collections are maintained as records of the individuals involved and do not reflect the views or values of the Hunt Institute for Botanical Documentation or those of Carnegie Mellon University.

About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Bacanel Varo
Jan 7/04

My dear Duggar —

A very Happy New
Year to you and yours!
It's a long time since
I have received your letter
from Montpelier - but
I have been pretty busy
and a number of rather
engrossing things have
happened to me. Hence

my silence.

Your letter came to Bocas while I was north on a short vacation and I found it here when I got back — the end of January. I am mighty glad that you have been having such a good time abroad, and only wish for your sake that your trip might have been prolonged another year. However, if you have arranged things so that you now get a fair amount of time for research, it will be just as well. What a difficult problem it is, to do investigation and the same time earn ones bread and butter! True, one can almost always manage

some time to do genuine work, but it is not easy to find time or means to do the kind and amount of work that some of us dream of doing. As I look back over the past year, I am particularly disgusted.

When I came back I found that things had not gone as

Jan 7, 1907

I wanted. (You see, I foolishly allowed myself to get tangled up in certain administrative business affairs.) So I had to devote all of last Feb. and part of March to things not strictly scientific. Then there was a little nigger mayor in a neighboring village that managed to make it interesting for me.

The culmination came in April when I was arrested on a false and trumped up charge of arson!

You probably know that the legal system here is based on the Code Napoleon and that a man is considered guilty until proven innocent. Moreover, the preliminary proceedings are held in secret and defense is handicapped and much delayed. Now add to this dishonest, malicious, and incompetent officials and you can begin to picture the result.

The gist of the case is this. We have now, (and formerly had more), a number of little thatch huts. Autumn, a year ago, (i.e. - 1904), I destroyed a lot of these by

burning them. They were filthy
and great breeding places for
the little vampire bats which
do considerable damage to
our stock. It happened that
in one of these, near an
empty one I was to burn,
there lived a disreputable
old negro, that I had been
unable, legally, to get off

Jan 7, 1907

the farms. It so happens
that after giving her
repeated notices to move,
I fired the neighboring
house and the house
in which she lived,
caught fire. No one was
in the house at the
time and after trying
to put out the fire &
failing, we hastily remove
the few belongings of
the negroes. Nothing
was damaged or lost.

except the house, and this was the property of the U. F. Co. With this incident as a basis - the nigger officials that I would not invite to my table, managed to cool off the case.

So I was sent to Bocas jail and held there pending investigation. The company at once took the required legal steps to secure my liberty, at least on bail; but this was refused and every thing done to make matters miserable for me. You see, this was the only chance for revenge; they had but little hope of even making a false conviction. The federal government in Panama was appealed to, but

the Bocas judge refused to
obey instructions, on the strength
of a manufactured technicality.
Then we appealed to the American
Legations. It was then arranged
that he be transferred to the
jurisdiction of the Supreme
Court in Panama. Finally
early in June, bail was granted.
After investigation, they have
failed to make a case against

Jan 7, 1907
me and are now
trying to quash the
case without its coming
to public trial. To acquit
me, means that some
officials will have to be
furnished, and they are
all so tied up with one
another, either through
relationships or graft
that it is a very difficult
matter. But I don't want
any Scotch - "not proven"

on any criminal charge! I want
a complete acquittal! I expect
I will have to go to Panama
shortly to again take up
the matter with the Amer.
Legation. It has not previously
been given full diplomatic
standing as that would have
jeopardized some concessions
the company was seeking. The
more important of these have
been granted, and now I want
the whole matter cleared
up.

The whole thing has been
a miserable affair, and the
chief thing I have gotten out
of it for the wasted time,
is a better acquaintance with
Latin-American & International
Law. And I doubt very much
whether this compensates for the

time taken from Science Fair
while I have been free since
early in June - the thing
has required a good deal of attention,
directly and indirectly.

Of course, the thing got in
to the papers in a garbled form.
Someday, it will make good
copy for a story writer. I have
only given ^{you} the gist of the affair.

Jan 7, 1907

— it is a lengthy tale,
and when I see you, one
of these days, we can
discuss it over a mug
of beer.

I have gotten some
few notes together, but
nothing quite ready for
press. I have not forgotten
your fungi and in a
few weeks shall send
you a small parcel.

I wish I could have
gone to the New York meetings

of the A.A.A.S. this year. Did
you go? What do you hear of
MacDougal and the Carnegie Inst.?
Of course, I am a little off the
main track, but it seems to
me that there is mighty
little good work appearing in
the U. S. in Physiol. or Ecology.
What is the reason? There are
plenty of capable men. Don't
they get the time or are there
only a few that have any
real enthusiasm for Botany?
Has it resolved itself into a question
of mutual self-admiration?!

I suppose by this time your
new house has been finished
and that you are enjoying it.
With best wishes for Mrs. S. and
yourself and the young lady,
Sincerely,
R. S. S. S. S.

West Chester
Jan. 10-07

My dear Duggar,

I can't hope
to write you much of a letter
at this time, but must send a
line or two to let you know I
am still on earth.

Your last letter contained
several startling announce-
ments. Should think you
would want to see a chub
on your German importation.
We had hoped you were fixed
for life in the at least one
good servant. I have had the
pleasure of employing a good
many and firing about the
same number during the
last six months, but can't
quite come up to your
combination. Heard of a
man the other day who was
riding out to West Chester with

a native. "Should think you
would find this a rather
long and tiresome ride to
take every day" - said the
stranger. "Well" responds the
native - it may be a little
long - but its seldom tiring.
I generally have a new
servant going out with me
in the evenings. My need
isn't that bad but we have
had some funny experiences.
Don't dare speak of it, - but for
the past two months we
have had an absolutely perfect
cook - but by all odds we
ever had, - and a fairly good
second girl. They have been
back and forth to Phil. several
times so we have reason to hope
they intend to stay.

Now that I have devoted a
couple of pages to the
important things of life,
perhaps I can come down
to the frivolous and discuss
the New York meeting.
Don't know how much you
may have heard from
others but will give away.
It was a fairly representative
crowd and socially the thing
was a success. Scientifically
there were a few good papers
but nothing very startling.
Hesper had an interesting
one on Hydrodistylin and
Coulter read a preliminary
of Gates on Enothisa which
impressed some, -
but not me. Think you
and Harry know more
about all the missing ones.

in this garden nor I have ^{any} there, but we don't count them.
But I wish you had been
there. You must get your
plans arranged now to
be at Chicago next year.
I don't believe it pays to
stay away from too many
of such meetings.

Had a lot of fun with
von Schenk about Mr.
Bell of Boonville? Told
him I had read about it
and he immediately jumped
to the conclusion that it
was in an agricultural
paper, so I didn't enlighten
him to the contrary. Suppose
he has held forth before on
the Dept. of Agriculture.
Was threatening to begin a
broad side in Science, but I
don't believe he will.

2. Jan. 19, '57

All of the people I saw
from Washington were
gloomy and had tales of
war a yard long to
relate. They all seem to
feel the lack of money in
the same way the old folks
do, - but consider they are in
a hopeless state and can't
tell what will happen next.
The Bunaw figlets were
warmer and warmer and
I doubt are how they can keep
from blowing up one of these
days. But it is too long a
story to write.

Suppose you have heard of
the death of Mrs. Smith.
Dr. Smith is worn out with
the anxiety of the last months
and is about broken down.

This is surely temporary I believe.

You certainly had a great experience at Thanksgiving time. I don't envy you the joy of being water bound in a Pullman and am glad you came out of it so well as you did.

What a big girl you have for a daughter! We were so very glad to have the photograph - and the Columbia calendar is before me as I write. Thank you very much for giving me such a pleasant and practical reminder of you. I don't believe Mrs. Moon has written to Mrs. Duggar yet, - but

she will before a great while. Wrote ten or fifteen notes last Sunday. Says she is trying to get them out of the way so she can write letters & people she really cares about. But won't be long until Mrs. Duggar hears - although if she is answering the least thought of individuals first, - your wife will come at the bottom of the list.

Mrs. Moon had a note from Mrs. Robinson yesterday in which she said Dr. R. had had grip and fainted in the hall way striking his head first on an oak chest and bruising his eye on the floor. They were afraid for Jonetun at first, - but he is getting along

all o.k. now.

Wish you were near enough to
ask a lot of questions about
mushrooms. It is too much to
write. Have gotten a lot of
information & experience
this fall and will try some
innovations this spring. Am
not in the business yet, - but
expect to be within a year.
Suppose you know a good deal
of the American spawn was
worthless this season. About 60%
of that used in this neighborhood
was complete failure - and none
of it as it should have been if
properly prepared. Hope the others
& the rest have learned their
lesson and will stop experiment-
ing now.

Good bye temporarily. Our
very best wishes to you and
yours for the coming year.
Hope we can all manage to meet
somewhere, sometime, some time
as always - Ever

Washington D.C.
13. January. 07.

My dear Dr. Suggar -

Now that the bustle of the past two weeks has subsided, I want to write you. First of all permit me to thank you for the reprint of your paper on the action of different solutions upon marine algae. It makes a nice write-up and contains several things of interest to me in writing my thesis. I wish also to thank you and Miss Eves for forwarding the publications which reached me some time ago. I enclose postage for the same.

I can see from your letter that you are having your hands more than full this year. Hope there will be more ease for you next semester. Are you doing anything this year with tissue cultures of higher fungi? I have not heard but suppose you are still cooperating with the Department.

I am quite sure that there was a reprint of Mr. Fulton's paper for you. But cannot say where it might be found.

Is Doctor Shanty carrying on any investigation this year? We heard that Mrs. Shanty had been quite ill with malarial fever. That was certainly hard luck for them.

The Convocation Meetings at New York were a great success. We all had the time of our lives. Many of the men expressed regret at not seeing you there. I saw Messrs. Bird, Reese, and Hedrick from Missouri. The first named told us a long story, much of which I knew last year. This is an unfortunate case. I don't see that anyone can help him very much. Most of the prominent botanists were present at the meetings, except (of course) the Harvard men. Jeffrey and Blakeslee being their only representatives. Blakeslee made a good impression on everyone. He holds an instructorship under Farlow, but is looking for something with ^a more promising future. R. H. Pond is working at the N. Y. Bot. Garden. He will leave the Pharmacy Dept. of Northwestern Univ. next summer. There is a position for someone. It will pay pretty well and the holder could pursue work in Chicago Univ. I couldn't extract any information from Pond as to his prospects, but assume that he has his hand upon another position.

Ganong told me that he is rewriting and enlarging his laboratory manual of plant physiology. Expects to make quite a book of it. Geo. T. Moore was present and as popular as ever with the men.

Mr. Brooks told me much of his work and plans at New Hampshire. He is evidently "making good" in every way. I became acquainted with Prof. Parsons through Cameron and he gave a good account of Brooks. I was very sorry to miss seeing Dr. Koch who was enroute for Chicago.

13 I 1907

from England. I came to know him very well last year and prize his friendship very highly. We have a small paper which is about ready to be sent in for publication.

Professor Atkinson was present at the meetings and I had a short talk with him concerning affairs at Ithaca. He says that matters stand right where they did last spring. Nothing has been done and ^{at} will not come up again until next spring. So I am no wiser than before seeing him. I met Dr. Durand but had no opportunity to talk with him. Had a talk with Crosby who is quite intimate with Whetzel, the Ag'l. botany man. I see nothing to do but to wait and "keep my ear to the ground". I am many times obliged to you for the information you gave me if Professor A. has nothing further to offer, it will indicate that his scheme has been squelched. At any rate I should want to look into it pretty thoroughly before going in there.

If the Secretary of Agriculture keeps on in his attempt to stamp out scientific investigation in the department everyone will be trying to get out. While we are here the thing to do is to make the best of the situation and prepare for something else. I enjoy my association with Schreiner and Cameron very much, and in working with them have gotten broader views of physiological problems. In company with Dr. Schreiner I have just completed the MS. of a

Digitized by the Hunt Institute for Botanical Documentation

bulletin containing some studies on soil fertility in which the plant is largely concerned. I have written a more technical paper on the same data which I am just sending off for publication.

I am pegging away at my thesis in my spare time during evenings and holidays. Shall probably get the first draft to you about the time you get the affairs of the first semester wound up.

Mrs. Reed joins me in sending our best regards to Mrs. Duggar and yourself.

Very sincerely yours

Howard S. Reed.

Plant Physiologist

Berkeley, Calif

1937 Who's Who says

Cambridge
Jan. 16.
1907.

Dear Prof. Suggs,

I am much
obliged for your
paper on marine
algae and salt
salutivins.

I did not go
to the New York meeting
which was fortunate
as I was attacked
by the grippe at the
end of December. Mr.
Robinson returned
Kaslo with the
grippe and Mr. Seymour
and others have been
down with it. My

wife who has been
aliened a fortnight
is just beginning to
sit up. I hope that
you all have escaped.

Yours, very truly

W. G. Harlow.

WOODS HOLL, MASS.

June 25-07.

My dear Duggar.

I have been wanting to drop you a line or two ever since I got to Woods Hole and now the receipt of your postal makes it imperative that I send a word of congratulation at least. Hurrah for the boys! (The girls don't mind it) I know you are glad it is all over, and we hope every thing is going as it should. Mrs. Faxon will write Mrs. Duggar very soon. Just at present we are trying to decide whether the children have whooping cough or not and in spite of the disinclination of the doctor (Dr. Bartholomew of Boston, - supposed to be the best child specialist in the state) to call it whooping cough, - I am afraid we are in for it. We have an excellent nurse for Tommy and are of course in the best kind of a place at the best time of year for the disease. Just the same it doesn't promise to be much fun and I would rather dodge it.

Since writing you about the increase in the mushroom business, I have received knowledge of about 200,000 sq. ft. of houses to be built this summer. So you see things are booming in this part of the country. I have

beds within a few weeks. Will probably
begin building by August first.

Our bunch of test beds are about
running out and you may be interested
in the result. The manure was in
very poor condition. Was so much that had
composted entirely too long and was wet
so I mixed it with about 50% fresh
manure and the stuff heated sufficiently
to drive off most of the excess moisture.
But the combination was far from
ideal and I wouldn't have thought of
using it in a house. I had the
room and had to get something into
it at once - so I used what I
could get hold of. Consequently the
results are not to be taken as the
maximum for the spawer under
poorer conditions. They are interesting
however as comparative results under
adverse conditions.

Inst. 6.

~~Inst.~~ spawned Feb. 21 - 1907! VI - spawned Feb. 25.

Beds 4 sq. ft. each.

Spawner

Appraised

Girded up
to June 5th

#1. Virgin spawner
imported from Ceylon.
Claimed to be just as
found in field, with
out transport. Good
results would
indicate this &
have been the case.
Spawner 8.3000 m. old.

Apr. 23

1450 grams.

June 25, 1907

MARINE BIOLOGICAL LABORATORY,

Spawen

WOODS HOLL, MASS.

As planned

Field
3 June 07

II. Virgin spawen same as last (#1) but one year older	Apr. 20 -	1940 grs. N. G.
III English "Pure Culture"	int.	
IV English regular	May 5 -	225 grs
V Lambersto #8. "direct"	" 6 -	365 grs
VI " #8 regular	" 2 -	585 "
VII " #11 (25% earth)	Apr. 21 -	1810 "
VIII " #11 (50% earth)	" 25 -	1010 "
IX " #6 direct	May 4 -	180 "
X " #10	Apr. 27 -	1269 "
XI " #9 direct	May 1 -	524 "
XII " #11 (no earth)	Apr. 26 -	1445 "
XIII " #8 regular	Apr. 25 -	585 "
XIV Peter Anderson's Fench ^{sterilized} medium		N. G.
XV Columbia regular		N. G.
XVI Columbia direct		735 grs.
XVII Alaska regular		128 grs.
XVIII Alaska direct		N. G.
XIX Eureka regular		638 grs
XX Eureka direct		1245 grs

It is very obvious which spawen was the best under the conditions used. The mushrooms from Eureka all were notably light and "feathery".

as compared with other mushrooms.

Another thing ~~which~~ apparently came out in the test was the fact that some spores is "infected". That is whole beds from a certain brick would produce mushrooms, which seemed to soon turn brown, become shiny and rotted away. Beds all around were normal.

This appeared in Lamberts # 6 both direct & random, altho the beds were not adjoining and in no other number of Lamberts.

"Columbia direct" was the worst bed, practically all mushrooms being badly affected. There could be no possible explanation for this condition due to the location of the beds, - and the manner bad as it was, was certainly the same except in cases noted farther added. There did not seem to be any "obvious" explanation except that the trouble was carried in by the spore - altho of course this may not be the reason at all. I would have sent you some of the plants, but I knew you were busy and I was so rushed that I didn't attempt it.

We are nicely settled down here and hope to be comfortably all summer. It was
collected by the Hunt Institute for Botanical Documentation

June 25, 1907

3

For the last two weeks. Prof. ^{WOODS HOLE, MASS.} W. B. Thomas
 of Mahan College & Milliman are the
 only botanists here at present. But more
 are expected. Work begins July 3rd. How
 we all wish "you all" could be here.
 I think it promises to be a good summer.
 Forgot to say that Davis expects to spend
 the entire season here, - in spite of his
 giving as the reason for his resignation that
 he was so over-run with work it would be
 impossible to come to U. S. this summer.
 Suppose you know Olive goes to Brookings
 S. D.

Will have sent this off. Did you hear
 from you when you get the chance.
 Mrs. Moore and I are anxious to know
 all we can about the new boy. If you
 were here we would have to find an entire
 case of something suitable. But we will
 try not to let the matter slip our minds
 when next we meet.

Love from us all -
 as ever
 Moore.

Feb 7 1897
CARTOLINA POSTALE ITALIANA

(CARTE POSTALE D'ITALIE).

10

cc Prof. Benj. M. Duggar
University of Missouri
Botanical Department.
(U. S. America) Columbia Mo.

Paris 11/2. 1904

Mon honrable Allégué,
je vous remercie bien cordialement
de votre dernier envoi (sur relations
of certain marine algae to various set
stations) et je suis bien touché de
votre mémoire! j'espère, peut
être, cette été, de finir avec
une contribution à l'étude des
Tabacées américaines - je désirais
des nouvelles Tabac et je fais
une révision de tout ce que l'on
a publié jusqu'à présent sur
le sujet - Est ce que vous
n'avez aucune Tabacée à
m'envoyer? Est ce que les Hypogae
sont nouveaux à St Louis? je vous
 prie à me rappeler avec tous mes respects
à M. L. H. Trillem. Daignez le saluer et
croyez moi très dévoué
J. M. Mathieu

L. H. BAILEY,
A. R. MANN, SECRETARY,
ITHACA, N. Y.

February 18, 1907.

Professor B. M. Duggar,
University of Missouri,
Columbia, Missouri.

My dear Duggar :

I am very glad to know that you can do the work on "Popular Plant Physiology". I will have the publishers send you a contract.

I want to make this as untechnical as I can and yet be accurate. It ought to cover all the ground of Sorauer, and a good deal more. It ought to give a rational explanation, or at least a point of view, on all the customary practices of agriculture. I hope that you will conceive of physiology in its broadest sense, having reference to the physiological or vital relationship of the plant to soil, climate and other environment, rather than a mere account of laboratory processes.

Yours very truly,

L. H. Bailey

West Chester
Dec. 14 - 07

My dear Duggar.

Your long letter of the 9th was much appreciated and I have been intruding ever since to acknowledge it, - and incidentally ask a few more questions. Am glad to know you are on a 5-days schedule for that leaves you one day in which to write to me and another for going to church.

I am pretty well convinced that one of my difficulties has been failure to thoroughly sterilize. I am sending you a few tubes which illustrate this. Some of them are ~~not~~^{now} fruiting and I take it they are some Coprinus. - if not let me know. The other tubes show no signs of fruiting, but I send them along for an opinion as to whether such an appearance is ever produced by Ag. campestris. These tubes were all supposed to have been

sterilized at 15-25 lbs. altho I did not do it myself. I know the inoculation was from *Ag. campestris* and until joint appeared, supposed it was good spawn. I don't think the tubes were infected subsequent to sterilization but that the *C. formis* developed from spores originally in the manure. All my cotton plugs have been practically in contact with the manure so that was another source of danger.

From the tubes you returned I think I will have no trouble in recognizing *Ag. campestris* spawn in composted manure. But as this medium is now to be abandoned, - I am wondering whether I can be fooled by its appearance on fresh manure and leaves! Would it be asking too much for you to send me a fresh culture?

two media - in order that I may have them for comparison. Don't make up cultures specially or go to any trouble, - but if you have them on hand and can spare them, - I would be greatly obliged. My time for the work is growing short as we will be turning up in May and with all I will have on hand, - I don't expect to be able to do any mushroom work - do any culture work etc. will have to be attended to in the next six weeks.

The lot of tubes made from fresh manure inoculated from English & American spawn, - of which I wrote, have practically all become contaminated owing to a fool boy who carried them into a damp part of the cellar near the furnace instead of to the closet I indicated. I had had some tubes in the first locality but soon abandoned it and sent the rest to the closet. I wish

ago when I got ready to go over
the tubes I couldn't find them.
When I located them they
were bananas. The cottons were
all the colors of the rainbow
and I have thrown about all
away and made up a fresh
lot. There seemed to be no
difference in the starting
of Eng. & Am. and all promised
well.

Here is a quotation from
Winkler's last letter on the
subject. This is ~~is~~ something of
a back down as he assured
Darlington some time back
that he intended making all
spawn from wild mushrooms.

"The fungus has become
general in some sections that
spawn grown from the tissue
taken from wild mushrooms
is more vigorous than spawn grown
from mushrooms that have been
propagated for several generations
in pure culture. Growers have
jumped at this conclusion too
hastily. No substantial evidence

2

14th 1907

nor experimental data of any kind
can be cited to corroborate this
belief.

We have taken a large per-
cent of the tissue inoculations
from English spawn and from
wild mushrooms found in the
fields (notably some fine white
specimens grown in southern
California) and will be in a
position to supply both kinds
(pedigreed & wild stock) the
coming season.

St Paul spawn continues
to do all that could be
expected of it, in hours that
come under my observation,
while Winkler is in N. Y.
His mushrooms are small,
long stemmed & light, besides
being poor yielders. Will be
able to give you figures
later in the season.

Will write you when I get
information regarding Winkler's
fertilizer. Sraime & Barrett

told me of it. I did not see
the literature myself.

Are you prepared to say
the quantity of H_2PO_4 & the
moisture on failing beds. Do you
add the solution several times
or simply make one application?
I would like to try something of
the kind on some beds just going
in now. But haven't much
space to devote to it, and can't
undertake a general experiment.
If you can give me a few pointers
however I think I would like
to sprinkle a few square feet.

Could you tell me the
diam. of iron pipe used
for shelving. Figured in your
Bulletin # 80. I would like
to use it in my house next
fall, but can get no
information as to the strength
of pipe necessary. I don't
want it heavier than
necessary - but on the
other hand, wouldn't care

I have the things fall down
with me.

What is your latest idea
regarding earth mixed
with manure for beds? I
have never been able to get
any comparative tests that
were satisfactory and the
fructification seems to vary
greatly among different
growers. If your thing earth
should be added, - when
is the best time? For
composting begins or at
beginning of first or second
turning?

I hope to be able to get some
leaves in a few days and will
then start a new lot on that
medium. You didn't send the
sample for which you spoke -
but I will get them a
little better sorted than
those I sent.

Am going to try making up
some bricks from the goods
for Botanical Documentation which you

returned. Have about a doz.
good ones.

How about running spawns
in large boxes or small tides,
dust from tubes, instead of
making up bricks? I presume
the bricks can be easier watched
and the bad ones can be
excluded, - but to have a single
bad form which spawns could
be used for spawning houses
would be a great saving in
labor and time.

I have written in great haste,
but hope you can make this
out. Please don't take too
much time or be in any
rush about answering my
numerous queries. I know
what it is to get such letters
and what a nuisance they
frequently are.

Will try to be more
"gossipy" next time, - if there
is any thing to write about.

We are all well, and Mrs.
Moore & the children join
me in much love to Mrs.
Duggan & yours
as ever
Elizabeth Moore

West Chester Pa

Feb. 16 07

Dear Duggan -

I send you by
mail today a sample of
the fertilizer as sold by
Winkler the early part of
the season. Also enclose
his letter just received
which please return when
you are through with it.

It strikes me as rather
"fishy". If he really has
a fertilizer that will increase
yield 50-75%, the cost of
transportation would cut
in figure what you. You
notice he is careful not
to make any very positive
claim backed up by actual
experience.

If you can't make a profit

good guess as to what
the stuff is I am
sending, - and it would
be of any service what
ever to you, - I will gladly
send him ^{to} ~~to~~ and
forward the wonderful
formula to you. I think
I may do it any way just
to satisfy my curiosity.

A friend of mine here
wanted me to ask you
about saw bugs or wood
lice - what ever you
call them. I have never
seen that they caused any
damage in beds, but he
says he has an old house
where they are particularly
abundant and in filling
up the side boards it

looks as though they had
"chewed" the sparrow. He
can find no other explana-
tion for the fact that
the crop is not coming
on as well in this
house as elsewhere. Do you
know any thing about these
bugs doing damage in
beds.

The "Eastern Importing Co."
Brighton, Mass. advertise
an insecticide for use on
mushroom beds, - guaranteed not
to injure the mushrooms
and death to flies, snails,
and all such pests. It
is a "jelly soluble in water
and sells at \$4.00 per 1/2 lb
which makes enough ^{30 gals solution} for 1000
all season" - so you see it
"comes right". Do you know
any thing about it?

Got the sample of leaves and
two tubes yesterday. The tubes
confirm what I said about
insufficient sterilization
for I don't think the contami-
nation from other
sources could have been
so universal.

Have made up a
number of tubes with leaves
and will inoculate on Monday.
I shall await the results
with much interest and
some anxiety. I am in
for the mushroom business
now to the extent of about
\$5000.00 and will simply
have to make the spawn
success.

do

See how to

sa

o

s

as

up

Dr. Moore

West Chester, Pa.
April 10-07.

My dear Duggar.

Under another cover I am sending you a small amount of soft soap. Not that I think you need it to smooth your way, nor for cleaning purposes - but because I think you will be interested in its use as a germinicide and fertilizer for mushrooms. The label will explain. What about salt anyway? Have you ever had any results from sodium salts? I am hoping the rest of the contents of the can to try out here. Am sending you our half - so use only 4 lbs of salt. It cost me \$1.09 - so I hope you appreciate my generosity in parting with half of it. Who is the Carbon Dioxide Co. anyway?

My leaf cultures are coming along very well indeed. The growth is whiter or more cottony than in summer, but I think there can be no question about the cultures being pure - and the right thing. I have been making some transfers to milk bottles and Mason jars - in order to get a sufficient quantity to use in a test bed as soon as possible, - and the question arises whether it is possible for me to let them run too long before using as spawners? That is, in transferring to a large container, is there any danger of contamination of the cultures? so they

run out? If so - how long must you let
them run, and do you judge by appearance
or length of time they have run? I presume
they can be taken out and dried at any time,
but if there is danger of their running out, - it
would be better to stick to small containers
or test tubes rather than try to get large
quantities of spawn under poor condi-
tions, - wouldn't it? Would it help
any if you ran the large cultures at a
lower temperature say 55° , - rather than
at 70° ? Would two months at 70° probably
be too long for a ^{pure} culture in a mason jar
inoculated from a tube which had been
running from 4 to 6 weeks? I feel quite
encouraged the way my first cultures
are running, and I don't want to fall
down if I can help it. The brick propor-
tion doesn't appeal to me - and I would
like to get around it if possible. I will
start over a bed, spawned from tubes,
and see how that works as a basis for
multiplying spawn. I suppose the same
precautions will have to be observed here
in preventing the spawn from going
too far?

You have undoubtedly heard of von Schrenk's
resignation. If you haven't I expect you had
heard of it. I am sure you had.

2.
Apr 10, 1857

letter from him, and he talks as though
he contemplated stirring things up a bit.
He certainly has no love for Washington
and the Department. Some body told me
the other day that the Bureau of Plant
Industry was now subd. the Botanists
Grave Yard - and cited Swinge, Fairchild
Coville, Torr and others who would be
dead to the world.

I spent last Saturday and Sunday looking
for a location around New York. While it
is not absolutely settled, it is more than
likely we will decide upon a place at
Water Mill. This is three hours from
New York City - about two miles from
Southampton, the Newport of Long Island
and a most delightful place. We would
have a beautiful house with about ten
acres of land, - all modern conveniences
and ideal for the children. It is not
directly on the Atlantic, but a ^{small} bay of the
ocean comes within two hundred yards
of the house. It will be ideal in summer
and in winter we will have to make the
best of it by getting our fun out of skating,
ice boating, etc. Will write you more
when it is settled.

We are all well and ^{hope} you and
yours are the same.

West Chester
Apr. 25-07

My dear Duggar,

I have been waiting for the tube to arrive which you spoke of in your last. I fear acknowledging your letter. But I am afraid the culture has gone astray. - at least I haven't received it yet. Am anxious to compare it with some of my tubes. Most of those I made at first are doing very well, but some of the later ones aren't quite up to standard.

Was interested in your estimate of the Eastern Importing Co. They seem to be out for the cash. I mixed up some of their dope - but can't see any results as yet.

The birds I have been watching here, certainly demonstrate that Whittaker's spawn was

no good this year. In
comparison with Samlerts
it has not given a tenth
of a yield. That is where
it yielded at all. I have
thirty two experimental beds
just coming into bearing,
spawned with everything
obtainable from both Shillan
& Samlert. - as well as some
real "virgin spawn". English
both regular and "pure
culture", Peter Henderson's
spawn in "sterilized" bricks
and all sorts of things. I
hope to get some information
out of it all, - but there
is no telling. The so called
English "pure culture" seems
to have been too cultured for
the U.S. At least it failed
to put in an appearance
in any of the beds. English
regular spawn to

Car out Samlerts idea
that wild spawn was
hardier. The English
in our house has
stood adverse conditions
(dew probably & frost until
too and an infected
condition generally) better
than any thing else. But
the English much sooner
under last conditions
is small - and nothing
to compare with even
the average American.
We are beginning to pack
up preparatory for our annual
move. Am getting sort of
tired of it and hope next
time will be final. Hope
your next year has sur-
vived the recent weather.
But I doubt it. - as the
chill seems to have been
universal.

American Philosophical
Society most of last week.
The few botanical gentlemen
don't turn out to any extent.
Harriman is always on hand
- and by the way he really
seems to be beginning to get
an idea of the color photo-
graph. Hasselberg was on
hand with some beautiful
charts illustrating the family
tree of the entire plant
kingdom. Prof. Goodale and
Wilson of the Commercial
Museum were the only other
botanists I saw, - but there
were lots of "other people".

Phil Cook has Chester's place
at Del. Ag. Col. Belwin it
is permanent. - although I
understand Chester is in
poor health and has only left
temporarily.

Mrs. Moor and I have had
colds, - but the rest of our
family are well and happy.
Hope you are all the
same and enjoying the
spring. Very sincerely
Moor

West Chester, Pa.
May 5 '17

My dear Duggar,

I was fairly well satisfied with my leaf tubes until your sample came yesterday and now I am rather discouraged. Certainly I have very few which are as well grown as the one you sent and it takes them much longer to look like any thing. I am sending you a couple of tubes a month old and you can see how they behave. Of course I had some better than this, but none that show the even, compact growth of your tube. It is evident that I do not have my leaves as firm as yours, a thing I will correct at once. But I also think I have not kept them at a high enough temperature. The tubes I am sending are pretty dry, but it doesn't seem to make much difference, those either do no better.

Most of my tubes start off with the cottony growth shown in the samples I am sending. Is this spore or contamination? I have some which undoubtedly started in this way, and produced good spores, - but I would like to have your opinion of the ones I am sending.

I have altogether too many contaminated tubes in those I make up, and it seems impossible to prevent it. For the most part I have been using wider mouthed containers than the ones you are using. I will try to prevent

May 5, 1917

2

account for all of it. I have fumigated the entire room and wash mushrooms carefully before going into the room. Then strip off foam out side of cap with flamed knife - a good thick "furling" and put pulled cap into sterile petri dish. I try & keep covered taking out a single piece at a time for inoculation. And yet in spite of every thing I get results in a large percentage of tubes.

Would you mind giving me your method of procedure, when it differs from mine, - in order that I may not be neglect some necessary step. Is it possible that I use mushrooms too old, which I am themselves contaminated internally, - as it were? I have been taking mushrooms from 1 1/2 to 2 in. in diam. - but entirely closed and quite firm beneath. What color are the gills of the mushrooms you use? Have they commenced to color at all?

I notice from the tube you send that you apparently inoculate in the a single piece, putting it about one inch below the surface, and in the center of the tube. Is this correct? I have always put the piece at least half way down and on the side, so I could see when it started. Is there any objection to this?

3
resist asking you a few more questions
after seeing your perfect sample
tube. If I thought I could turn out
500 like that next fall. I would be
profoundly happy. I think I am going to
have a good house with good beds near
a good market. The one thing needful
to make a success is good reliable labour.
The whole thing will mean a lot to me
and so I hope you don't mind my bothering
you again.

We are in the midst of operating and
packing and it is an awful job. Hope
I never have to go through with it again.
Expect to get away from here the week of
the 21st - and will stay in Woods Hole
until October first. Truly wish you
and your family were going to be with
us.

I have been intending to ask you about
McKumby? Do you ever hear from him. Very
kind Mr. Lane, Asst Secy of the Canal
Commission saw him in Panama
last winter. He was still in custody,
going about with a police officer. Had
to spend several months in the wretched
jails of Costa Rica, but would stand it
all right. The American Consul was
apparently doing every thing possible to move the
thing along, but it had been dragging then a
myriad of other things. It would be noted. On his way back to Costa Rica
and a few more

MAY 27 1907

My dear Duggar: - Unfortunately we have no man at present who would meet your requirements - The bacteriological department here is associated with animal pathology so that few of our students take any except elementary courses -

Would a woman do? We have an exceptionally fine one, who has been specializing in morphology & knows enough bacteriology to be an assistant in the lab'y of that dept this quarter. She gets her Master's degree in June. Even if she'd answer, you would have to make it an object to her. A \$1400 position is awaiting her, but a college position & a chance to develop it would be some attraction. She is a

five teacher withal, and a five women -
Let me hear - With kindest regards to
Mrs. Duggar, Ever cordially yours,

O. R. Barnes

THE MISSOURI BOTANICAL GARDEN.

WILLIAM TRELEASE, Director.

St. Louis, Mo.,

June 10, 1907.

Dear Dr. Duggar:

Will you please give me your specific determinations for your named varieties of mushrooms? I am able to trace some of them, correctly, I suppose, from the last Winkler catalogue, but should like confirmation, and I fail to locate Holland, which, from its appearance, - unless we have raised a weed in the bed allotted to it, is fabaceus. Will you also give me the citation for villaticus, as a species?

We have been pleased as usual to learn of the successful commencement last week. I was distressed a few days ago to learn of Mrs. Whitten's accident I hope that she is well on the way to recovery now, and that you will let Whitten know that I am hoping so.

With regards to Mrs. Duggar,

Wm. Trelease.

NEW YORK STATE COLLEGE OF AGRICULTURE
AT CORNELL UNIVERSITY
ITHACA, N. Y.

L. H. BAILEY, DIRECTOR.
G. N. LAUMAN, SECRETARY.

June 24
OFFICE OF THE DIRECTOR

June 24th, 1907

Professor B. M. Duggar
University of Missouri
Columbia, Mo.

My Dear Duggar :--

I hope that complications will not be such that you cannot join the company at Cornell. Of course nothing definite can be said at this end until after the Governor disposes of our bills but we really have no doubt in regard to the approval of the regular appropriation bill under which you would come to Cornell.

Just what will be required of you here will depend largely on yourself. We hope that the fundamental introductory Botany may still be taught for us by the College of Arts and Sciences. What training for our work the students lack when they come to us from that college we shall need to supply, be it little or much. Of course I want every man to pursue his investigational work. I do not consider a man to be worth much as a teacher in a university unless he is also discovering new truth for himself. He lacks inspiration and enthusiasm if he is not doing such work. I at one ^{time} thought, as you know, that it might be best to ask you to Cornell to take up purely research work, but it did not seem wise to try to work it out in that way. It seemed to us to be advisable to develop the pure research side along plant-breeding lines rather than along the technical plant physiological lines. However, if you should come you should, of course, have free scope to undertake any kind of investigation that you desired to do consistent with teaching duties. You know very well what the spirit is at Cornell University in regard to

June 24 1907

these matters and, therefore, no explanations are needed from me.

It is my purpose to let each man be the head of his own department and only of his own department. Rather than to develop a great department of Botany with one administrative head, thereby forcing the head professor to devote himself largely to executive duties, I think it better to let each man carry his own work and to develop a botanical unity by consultation between the different parts. For example, I am proposing to let Professor Whetzel develop a department of Plant Pathology. Doctor Webber will develop his own work. J. B. Norton is coming to us next year as an assistant to Doctor Webber. We should expect you to develop the physiological side of the work, using the term in its broadest ecological sense as well as in its restricted laboratory sense. Whatever went forward in this department of Plant Physiology you would be responsible for and have the headship of. I should expect also that you and Webber and Whetzel would all work together harmoniously for the development of the plant work of the institution. As I wrote you, we have a very good man who has been training under Professor Hunt who could take the more distinctly economical phases and who would be your instructor.

The field that you see, as outlined in your letter is, I think, almost exactly what I also see. What the work will develop into will depend on the conditions, but more particularly on yourself and your own point of view.

It is unnecessary for me to say, of course, that we should all be delighted to have you join our staff. If it were not so, I should not have opened the matter at all. I hope to hear that you are free to come.

Yours with best wishes,

F. H. Bailey

THE MISSOURI BOTANICAL GARDEN.

WILLIAM TRELEASE, Director.

St. Louis, Mo., June 26, 1907.

Dear Professor Duggar:

Thank you for the mushroom data. Some of the forms I have not specifically recognized. Next winter I am going to try to get all of the different species in our mushroom beds.

I am delighted to know of your rejoicing over the little boy. My compliments to Mrs. Duggar.

Truly yours,

Wm. Trelease.

Professor B. M. Duggar,

Columbia, Mo.

OFFICE OF THE TREASURER
CORNELL UNIVERSITY
ITHACA, NEW YORK

June 27/1907.

Professor B.M.Duggar,
University of Missouri,
Columbia, Mo.

Dear Sir:-

I have the honor to inform you that the Board of Trustees at its meeting the 19th inst. elected you Professor of Plant Physiology in the New York State College of Agriculture, at a salary of \$3,000.

In notifying you of this appointment, I beg to call your attention to the following action of the Trustees at their meeting June 5/1906, viz:-

Resolved, that in making appointments in the New York State College of Agriculture, the University assumes no responsibility for salaries in excess of the appropriations received from time to time from the State of New York for the maintenance of said college, and that in notifying appointees the secretary call their attention to this action.

Yours truly,

C. D. Smith
Ass't Sec'y.

NEW YORK STATE COLLEGE OF AGRICULTURE
AT CORNELL UNIVERSITY
ITHACA, N. Y.

L. H. BAILEY, DIRECTOR.
G. N. LAUMAN, SECRETARY.

OFFICE OF THE DIRECTOR

July 2nd, 1907

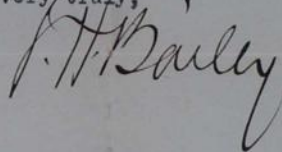
Professor B. M. Duggar
University of Missouri
Columbia, Mo.

My Dear Duggar :--

I am glad to have your telegram saying that you are coming to Cornell. I shall await your letter with interest and then will write you more fully.

I do not know what the complications are at the University of Missouri, and of course cannot advise you in regard to that matter. I only know that we hope you are free to join our forces here.

Yours very truly,



Chocoma M

Dear Prof. Dugan July 6, 1907.

We returned to Cambridge about a fortnight ago and came up here on July 3. My wife will remain here but I shall have to be in Cambridge a good deal of the summer.

I am much obliged for the ~~flora~~ flora of Mr. Daniels mentioned in your letter which I found on my return.

We had a hurried and rather fatiguing trip but enjoyed ourselves very much. At Ulaala I met more distinguished botanists than I shall probably ever see again, among them some whom I had never met, a Pfeffer, Warming, & C. Hansen etc. Hahault and his wife were there and we saw

them several times. They were
to make a trip to some part
of Sweden before returning
to Montpelier. They had
many pleasant things to
say of you and your
wife and also of your
little girl. (or was it a
boy?) They left their children
at Nancy with their grand
parents. The weather in
Europe was bad as in
America and the season
very late. Fortunately,
however, almost the only
pleasant weather we had
was during the Upsala
festival. Everything was
very gay and lively but
I can hardly now stop to
give you an account
of the celebration. Yours truly
H. E. Salter

NEW YORK STATE COLLEGE OF AGRICULTURE
AT CORNELL UNIVERSITY
ITHACA, N. Y.

L. H. BAILEY, DIRECTOR,
G. N. LAUMAN, SECRETARY.

OFFICE OF THE DIRECTOR

July 12th, 1907

Professor B. M. Duggar
University of Missouri
Columbia, Mo.

My Dear Duggar :--

I have heard nothing from you since your letter of July 1st, but I hope that matters are so shaping themselves that you see your way clear to join us. We must very soon be making out our courses of study for next year. Just as soon as you are clear in your own mind that you can accept the place at Cornell, I wish that you might arrange to come on here and let us talk over the courses of instructions and the plans for the work for the coming year. We would pay your expenses.

Yours very truly,

L. H. Bailey

United States Department of Agriculture,
Bureau of Plant Industry.

ON BMD'S
LEAVING
MO.

Office of Assistant Chief of Bureau.

Washington, D. C.,

Gunn, Colorado, July 15, 1907

Dear Dr. Duggar,

A day or two before I received your letter a friend in Columbia wrote that you had received a call from Cornell. But for this your letter would have been the first intimation of any such change as you contemplate.

For my own part I am very sorry to see you go, and hope they will see some way to make it desirable for you to stay. Last year was a most pleasant and profitable year for me, and I had hoped for a better one this year - one with less interruption. I do not like to think of having been with you only one year. If they would only see things as they should I feel sure they would give you increased salary and increased opportunity in order to keep you. If they cannot do this I see no reason why they should not release you

from your obligation. 15 VII 1907

But in any event it can only be looked at from the point of view of the individual, and I am glad for you at this new opportunity.

I do not know what to say or think with respect to myself. If you leave just at this time, I cannot even surmise what the Board will do. Mr. Floyd is I suppose equally at sea. I have heard nothing except in your letter and have had very little time to think over the situation.

In any event, if you go, there will be a good deal of confusion this fall.

You have looked after my interests so well in the past, that I feel sure you will do what you can for me in case of a change. I know nothing of what will be done and will be glad if any help you can give me at any time. I feel sure that the best thing for me at the present time would be for you to remain. But in case this is not to your interest, the changes which come at Missouri

15 VII 1907

will be of the greatest importance to me.

With a Bacteriologist and a head of the Department to secure, the department will be in bad shape to say the least.

We have had several heavy rains here lately and the Plains are full of Fungi. The large puffballs are most numerous. A small *Agaricus* - growing almost invariably in 'fairy rings' is rather abundant, but the larger form with a rough surface which will not peel off is not so abundant. I will try and get the culture for you as soon as the tubes come.

Mr. Floyd has sent me some killing fluid and I will try and preserve some of the parasitic forms, which are very abundant at this time.

If we have a dry spell now there will be hundreds of fungi cured in the sun. I have thought of sending some cacti, etc, but there

15 VII 1907

are by no means as abundant here
as at Akron.

In case I find some good fresh Agarics
I will try sending you some by mail. I
feel sure they will go through all right.

I enclose a postal note to cover
the express bills. In case this amount is
not right please tell me for I am somewhat
confused in regard to them.

With best wishes, I am,

Sincerely yours,

A. L. Shantz

Juniper
Colorado.

PM 22 VII 1907
Ithaca, July 16

Dear Duggar:

Dr Schurman is in town today. He has not written you because he says he has nothing to add beyond what I wrote you. He hopes you are free to come & so do I. We now want to get out our courses of study & ought to have you here now for consultation. The Governor has signed all our bills.

In haste

L. H. Bailey

NEW HAMPSHIRE COLLEGE
AGRICULTURAL EXPERIMENT STATION.
DURHAM.

STATION COUNCIL:

WILLIAM D. GIBBS, M. S., DIRECTOR.
FRED W. MORSE, M. S., CHEMIST AND VICE-DIRECTOR.
FREDERICK W. TAYLOR, B. Sc., (Agr.) AGRICULTURIST.
E. DWIGHT SANDERSON, B. S., ENTOMOLOGIST.
HARRY F. HALL, B. S., HORTICULTURIST.
EDWARD L. SHAW, B. Sc., (Agr.) ASSOCIATE AGRICULTURIST.
CHARLES BROOKS, A. M., ASSOCIATE BOTANIST.
T. J. HEADLEE, Ph. D., ASSOCIATE ENTOMOLOGIST.
J. K. SHAW, B. Sc., (Agr.) ASSOCIATE HORTICULTURIST.
B. E. CURRY, M. S., ASSOCIATE CHEMIST.

ASSISTANTS:

FRANK A. TINKHAM, B. S., ASST. IN DAIRYING.
GEO. S. HAM, FARM FOREMAN.
CLARENCE FOWLER, FOREMAN OF GARDENS.
EDITH M. DAVIS, PURCHASING AGENT.
MABEL H. MEHAFFEY, STENOGRAPHER.
ALICE G. BAKER, BOOKKEEPER.

July 17-07.

Dr. B. M. Duggar,
Columbia, Mo.

Dear Dr. Duggar:

Your letter of June 15 was duly received. I was glad to learn that you had such a pleasant commencement.

Mrs. Parsons informed me some days ago that you had a young Polarist in your family. I suppose the work of the department is now moving more satisfactorily than ever.

As to my work on the fruit spot I think I have some interesting physiological and cultural data. The problem of fruit spotting has been worked over several times. As many as three German investigators have published upon the subject and also Jones and others in this country. A fungus has been found in some cases but always proven "not guilty". Were it not for the abundance of negative data I should feel very sure of the outcome of my experi-

invents. Of course it is possible that I am working on something different but I doubt it.

It took me a long time to find out what sort of medium the apple tissue should be transferred to. It should be some weak solution ^{and} sterilized tap or distilled water is very satisfactory. By using such media I was able to get the fungus from any sort of spot, however small, and from any variety of apple. The fungus is a peculiar and interesting one. It is not a vigorous parasite, possibly not a true parasite, yet I think it is possible that its presence in the bottom of the lenticel like stomata is at least the partial cause of the drying and browning of the surrounding tissue. In liquid cultures the fungus grows in colonies or spots on the sides and bottom of the flasks, forming a growth on top only after a week or more. I have not worked out the nature of its holdfasts. It prefers acid or neutral media. It slowly liquefies various gelatins. It curdles milk slightly slowly converting it into a watery dark brown liquid, the brown layer reaching the bottom of the tube only after several weeks. My enzyme and acidity experiments on apples were not conclusive. The fungus will not inoculate

July 17, 1907

NEW HAMPSHIRE COLLEGE
AGRICULTURAL EXPERIMENT STATION.
DURHAM.

STATION COUNCIL:

WILLIAM D. GIBBS, M. S., DIRECTOR.
FRED W. MORSE, M. S., CHEMIST AND VICE-DIRECTOR.
FREDERICK W. TAYLOR, B. SC., (AGR.) AGRICULTURIST.
E. DWIGHT SANDERSON, B. S., ENTOMOLOGIST.
HARRY F. HALL, B. S., HORTICULTURIST.
EDWARD L. SHAW, B. SC., (AGR.) ASSOCIATE AGRICULTURIST.
CHARLES BROOKS, A. M., ASSOCIATE BOTANIST.
T. J. HEADLEE, PH. D., ASSOCIATE ENTOMOLOGIST.
J. K. SHAW, B. SC., (AGR.) ASSOCIATE HORTICULTURIST.
B. E. CURRY, M. S., ASSOCIATE CHEMIST.

ASSISTANTS:

FRANK A. TINKHAM, B. S., ASST. IN DAIRYING.
GEO. S. HAM, FARM FOREMAN.
CLARENCE FOWLER, FOREMAN OF GARDENS.
EDITH M. DAVIS, PURCHASING AGENT.
MABEL H. MEHAFFEY, STENOGRAPHER.
ALICE G. BAKER, BOOKKEEPER.

apples from the surface after they have gone through the sweat. I have made hundreds of inoculation experiments by means of platinum needle stabs. The fungus produces a brown layer of apple tissue having a radial width of from one to two mm. from the needle path. It will brown only certain apples. I made from 10 to 30 inoculations on each apple. When one took usually nearly all did. I am not certain what characteristics the fungus prefers in the apple. The above fact does not disagree with that, that the spots become large and sunken only on certain apples in storage.

The fungus varies so with the medium used that I at first thought I had several fungi. It bears some resemblance to a *Streptothrix* but is not one. I have run it out of everything but the genus *Clasterosporium* and it does not seem to belong in any species of this genus. It may belong in the questionable genus *Spilocaea*. I hope to soon get around to work on these points again.

Just now I am pushing ~~have~~ pushing
my field work on this and other subjects.
I am spraying with various mixtures, toxic
and non-toxic. I am trying to determine
the time for spraying. Also am spraying
certain limbs and certain trees with spores
at intervals of two or three days. I have
a good deal of work planned to be done
when the apples are first gathered - surface
inoculations, obtaining the fungus from
different varieties and from different sections
of the country, etc. I hope to secure some
transpiration data also. If I can only secure
considerable positive data from these experi-
ments I will have a very interesting problem
to finish. This is probably sufficient to
give to give you an idea of the trend of my
work.

A department of Botany was created here
this year, beginning July 1. and my salary
raised from \$1200 to \$1500. I asked for
a larger increase. I also asked for micro-
scopes, better quarters, and an assistant to
relieve me from some of the elementary in-
struction. I will probably be unable to secure
any of these. They won't do any more for a
man here than they think they are compelled
to do in order to keep him, at least this is
true from the college side. It is awful hard
to get anything done when you are loaded

July 17, 1907

NEW HAMPSHIRE COLLEGE
AGRICULTURAL EXPERIMENT STATION.
DURHAM.

STATION COUNCIL:

WILLIAM D. GIBBS, M. S., DIRECTOR.
FRED W. MORSE, M. S., CHEMIST AND VICE-DIRECTOR.
FREDERICK W. TAYLOR, B. SC., (AGR.) AGRICULTURIST.
E. DWIGHT SANDERSON, B. S., ENTOMOLOGIST.
HARRY F. HALL, B. S., HORTICULTURIST.
EDWARD L. SHAW, B. SC., (AGR.) ASSOCIATE AGRICULTURIST.
CHARLES BROOKS, A. M., ASSOCIATE BOTANIST.
T. J. HEADLEE, PH. D., ASSOCIATE ENTOMOLOGIST.
J. K. SHAW, B. SC., (AGR.) ASSOCIATE HORTICULTURIST.
B. E. CURRY, M. S., ASSOCIATE CHEMIST.

ASSISTANTS:

FRANK A. TINKHAM, B. S., ASST. IN DAIRYING.
GEO. S. HAM, FARM FOREMAN.
CLARENCE FOWLER, FOREMAN OF GARDENS.
EDITH M. DAVIS, PURCHASING AGENT.
MABEL H. MEHAFFEY, STENOGRAPHER.
ALICE G. BAKER, BOOKKEEPER.

down with mere routine instruction. I am anxious to get another job and either leave or make them get more liberal to botany than they have ever been. I am liking Durham better the longer I stay, yet would be glad to leave for the right place if I cannot make things move faster here. By the end of the season I expect to have the data completed for a bulletin on apple and potato diseases and their prevention, possibly for one on various fungicides and their action. I will also have my fruit spot work brought to some sort of conclusion. So I think I could soon leave to fairly good advantage.

I corresponded in regard to one or two positions earlier in the year but only within the past few days have I heard of anything desirable. Director Stewart of West Virginia wants a plant pathologist at a good salary. I have the support of the Science Agency in the matter. As you probably know Prof. and Mrs. Rave used to be

at the West Virginia station. I write you
this so that if you get a letter inquiring
from Mr. Stewart you will understand the
situation. While I am at a disadvantage
in having so small amount of literature in
print I believe with your help I will stand
a good show for the position.

Very sincerely yours,

Charles Brooks,

July 18, 1907.

My dear Duggar:

I have heard nothing about your movements since I left Columbia, but I suppose you have everything settled by this time. I had a note from Schurman since I arrived. He made no reference to the contract but says "I have set my heart on Duggar's return to Cornell. We must have him. I always wanted him but never before had the money to offer him a professional salary."

I have had a busy time here all told but the work is not becoming confined to the

announcement till later, for
I can postpone moving the
furniture if that happens to
be of any importance.

Mrs. Rice and the children are
having a comfortable time in
Nova Scotia, and I trust your
family are all well.

With regards to Mrs. Daguer
and hoping to see you in Ottawa
in September, I remain

Very sincerely yours,
A. Ross & Co

regular routine and is getting
quite easy. I am having a good
time, rooming in West District
Hall and getting my meals at
the Club, which by the way,
also furnished other con-
veniences.

I want to send word to Seabrook
soon about the shipment of
my furniture. A man has
rented the house and wants
it not later than ~~Aug.~~ Aug. 20.
As I am paying rent I
prefer to let him have it
earlier and have just
written to find out how
early he can take the house
suggesting August 1st or
a soon thereafter as
convenient to him. So
let me know when you have
everything settled even if
you cannot make an

THE GRADUATES CLUB
NEW HAVEN, CONNECTICUT

July 22nd, 1907.

My dear Duggar:

Since I wrote you I have received your letter, and was surprised to learn that you had not heard from Schuman, especially in the light of his letter to me. But I know he has been away from Ithaca ever since ~~commenced~~ I hope your interview with the Executive Board will have a satisfactory outcome.

I have just learned from Mr. Conley that the man

who has rented Thilly's house
does not want it till the
middle of August, so there
is no need of my rushing furni-
ture off till about the close
of the summer session then.
I have heard nothing from Wether-
ington at all.

We had some very sultry days
towards the close of last week
but a good rain Sat. night
cleared the air and it is deligh-
tful now. But I am impatient
to get to Ithaca and get started
on life there. There is no form
of outdoor life in New Haven ^{in summer}
except swimming and a long
can ^{not} be a necessary preliminary
for that. But I found Ithaca
a great summer place last year
largely because of the open country
and lake nearby.

That institution in Houston,
Texas, has now written to me to
find out whether I am in a
position to consider an offer of the
Presidency at a salary of \$7500 a
year and in home. Prof. Jesse
thought the position not as good as
I had in Mo.; I wonder what advice
he would give me now, so in
his mind the Cornell position was
distinctly inferior to the one
in Mo.; and the salary has been advanced
to \$10000 a year.

Meriam writes me that Dr Jones
has been assigned the function
of finding a successor to Dr Jones.
Really Jesse and Williams have
so little moral courage that I
now feel sure the Teachers Col-
lege is going to the devil. I have
been encouraging Meriam to
refuse to go to Illinois, but as
the Illinois people are not
easily discouraged I have now
written him advising that he
go if the offer is at all tempting.
He seems to fear that Jones will
be made Acting Dean of the S. C.
also and that he will have to go
to him for advice and authority.
Perhaps something can be found
for Counselor too and then they
can let Jones and Pickard run it
for the men who are also in the College
can withdraw from the S. C.
without loss of standing. Every bit
of news makes me rejoice that
got out. Sincerely Yours, Hill

STATION No. 1.

SEAGRAM EXPERIMENT STATION,
AUDUBON PARK, N. O., LA.
R. E. BLOVIN, M. S.,
Asst. Director, in Charge.

STATION No. 2.

STATE EXPERIMENT STATION,
BATON ROUGE, LA.
S. E. McCLendon, B. S.,
Asst. Director, in Charge.

Agricultural Experiment Stations

OF THE

LOUISIANA STATE UNIVERSITY AND A. AND M. COLLEGE

W. R. DODSON, A. B., B. S., Director.

OFFICE OF THE DIRECTOR.

All Bulletins are sent from Baton Rouge.

STATION No. 3.

NORTH LA. EXP. STATION,
CALHOUN, LA.

J. B. GARRATT, B. S.,
Acting Asst. Director, in Charge.

Baton Rouge, La., July 29, 1907.

Mr. B. M. Suggs,
Columbia, Mo..

My dear Mr. Suggs,

Since writing to you the other day I have had letters from Mr. Hunt, of the Pennsylvania State College, regarding a very good position in the Department of Botany. I wrote Mr. Hunt at first that I could not consider any position that would take me away from my present work before January 1st next, and not for that time until the matter at Missouri had been settled as far as my interest might be concerned. In the letter received from Pennsylvania today there is an intimation that the position there may not be filled until the later date, and the request that I inform the authorities there as to whether or not I can consider a proposition for that time.

I should therefore be glad to know, as soon as may be, just what the final outcome of things at Missouri will be. I may say frankly that if you are to remain in your present position I should prefer the position at the University of Missouri; otherwise, the one at Pennsylvania State College. I fully realize that in each case my name will not be considered if some one can be found for the place for the opening of the session, and I suppose that January is far enough off for things to move in a leisurely way. But I can understand why Mr. Hunt might want something more definite than I have been able to write him; and if there is not to be a postponement of the feeling of the Missouri

STATION No. 1.

SUGAR EXPERIMENT STATION,
AUDUBON PARK, N. O., LA.
R. E. BLOVIN, M. S.,
Asst. Director, in Charge.

STATION No. 2.

STATE EXPERIMENT STATION,
BATON ROUGE, LA.
S. E. McCLENDON, B. S.,
Asst. Director, in Charge.

Agricultural Experiment Stations

OF THE

LOUISIANA STATE UNIVERSITY AND A. AND M. COLLEGE

W. R. DODSON, A. B., B. S., Director.

OFFICE OF THE DIRECTOR.

All Bulletins are sent from Baton Rouge.

STATION No. 3.

NORTH LA. EXP. STATION,
CALHOUN, LA.

J. B. GARRETT, B. S.,
Acting Asst. Director, in Charge.

Baton Rouge, La.,

place, I should like for him to know at the earliest possible time. I shall be greatly obliged if you will telegraph me at my expense regarding any definite developments in the matter.

Mr. Hunt has written me that it is upon your recommendation that my name is being considered by him. This adds to the obligation I am under for your frequent kindness to me.

With sincere regard, I am,

Very truly yours,

Harry R. Fulton.

Woods Hole.

Aug. 2.07

My dear Druggar.

I am pretty busy myself just now but must stop long enough to acknowledge your letter. It is wonderful how delighted I am about the Cornell Professorship, both on account of the professional prospects and because we may all now hope I see something of you and your family. Before told me there was something in the air but there was some uncertainty as to how it came out. It seems to me the only thing for you & Co. is to tell the Pres. and Board to go to the devil, - that you are going to Cornell. It is a shame you have had to waste so much time on the matter. The U. of Mo. is in luck to have you stay until the second term and ought to be glad for small favors.

"Before I forget it," if you can suggest somebody who could give a "general-elementary-high-school type" course down here, I would like to know about him. There is demand for such a course and I am going to try putting it in next year. Would like some one in touch with pedagogical work if possible although that is not necessary. I will pay about \$200.00 for the six weeks with one or two extra. The course could be limited to 15; and I would be satisfied if there were 10. If you can

2

suggest a good man.

Another thing. I have about agreed to undertake the editorship of a cryptogamic volume for the Natural History series of Henry Holt. I will do the algal and probably the bacteria. But want some one to do fungi. - Whinn-moss and fous & lichens. Now, would you consider doing the fungi for the book? You would have from 60-75000 words in which to cover all fungi in an untechnical way and I don't think it would be a great deal of work. At least not to compare with a critical presentation of the subject in any but the "natural history" style. This would be nothing systematic, of course, but just general questions relating to life history, habits, economic importance etc. You may feel rather swamped just now, - but if you can see any light ahead with in the next 12 or 18 months for a little literary work, I wish you would consider it. It may not amount to a great deal financially, - but I think it will develop into a second book which will be a money maker.

I hope very much it will be possible for you to have some tubes of spores made for me this summer or early fall. I expect I can see for that Chester about Aug 22nd and will be glad to send you some spores myself. But I would not mind seeing to it should

Aug 2, 1907

I know there would be something & all
 dash upon if mine failed. I will take
 all you can have made up to 500 tubes
 and pay whatever you consider it worth.
 If they could be put up in bottles similar
 to the one you sent, it would cheapen the
 cost of containers and be even more satisfactory.
 That was a beautiful culture you sent
 and I was glad to have it. I will need
 spawn enough for about 12,000 sq. feet, which
 means about a thousand bricks & support. How
 many cultures ought I to provide in order
 to insure having enough to spawn that many
 bricks? The first chance you have drop me
 a card and let me know about how many
 cultures you would be able to have prepared,
 what form they would be in, and what
 the probable cost would be?

You didn't say anything about the
 children, but I presume they are thriving.
 We have been fighting the whooping cough "behind
 us" - and are glad it is nearly over with.
 Hope Mrs. Duggar has entirely recovered. Am
 glad she is away from the heat of Columbia.
 Please accept the heartiest congratulations
 from all of us upon your change from
 Missouri to New York. We certainly
 ought to see more of each other when
 we get to living in the same state.

Will visit again soon. Corvill
 is due here today & lecture tonight, and
 Frank S. Collins will blow in in time
 to take a trip to Cuttyhunk at 9 A. M. tomorrow.
 Remember me to all the friends & all our
 things move on

THE GRADUATES CLUB
NEW HAVEN - CONNECTICUT

Aug 4th 1907.

My dear Duggar:

Very glad to get your
favor of the 2nd this morn-
ing. I had heard yesterday
from Noyes that
you were coming
We have but he mentioned
no details. Of course
you will be wanted till
the middle of the year
but I shall be glad
to welcome you to Cornell
at that time.

I shall not be able
to see you at Ithaca this
summer unless you
run into town between
the 16th & 18th Aug. and the
time of your going West,

as I cannot leave this till the 16th.
But no doubt you will be in Ithaca
occasionally during your stay in Geneva,
and you will be able to find me there
thill, at any time after Aug. 16th. I
cannot get my horse till Sept. 1 but
I shall watch repairs during those
two weeks.

President Schurman is now in Ithaca
and probably you have been able to
see him. You are like myself
fortunate in being able to start in with
such cordial support from him.

The Board finally decided to offer my
place to Bruce Payne of Virginia, but
they had mismanaged the arrange-
ments with him so thoroughly that
he was afraid the administration was
too weak for him & ~~to~~ ^{to} ~~resign~~ ^{resign} himself.
He will probably de-
cline. On that account I have not
said anything about the offer in writ-
ing to the people in Columbia.
Payne is too good a judge of men not
to see their weakness, Jones et al in
a short time.

The Board's statement & Jan is a few
days remarks that he would be will-
ing to wage that Hetherington is
putting up no amateur stunt in his
present dealing with the Board.

I hope to have George here with me
next week before he goes to Boston
meetings. Then he will come to Ithaca about
Sept. 1. Hoping all go on well.
Wm. H. Allen

Water Mill, N. Y.
 WOODS HOLE, MAES. Oct. 1-07

My dear Duggar,

The folks are waiting for me to drive to Southampton with them so I can only write a line. It has been on my mind to write you for some time, but what with moving, getting settled down here etc. I have neglected it.

I am glad you have some cultures for me, but sorry you had trouble getting material from which to start them. Will you please forward this lot by freight collect, simply addressed to George T. Moore Water Mill (L. I.) New York. They ought to be here by Nov. first. - The time I calculate to start my bracks.

I have some tubes and bottles in West Chester made about a month ago which I am depending upon - with those I get from you, to make ^{up} a ~~headspan~~ for my house. I can't tell however, how many of mine will go bad however. I hope you will be able to send me at least 100 bottles and as many more as possible. Send the bill along with the first lot you ship or any way you wish. It may be some of the later ones, to make you feel sure of them. I am very

express, - but I can let you know
of that later

The mushroom house is complete
and I will let the contract for heating
in a few days. Am anxious to have
your opinion of the net fit and hope
it may not be a great while until
we can have you and your whole family
with us. I hope you found Mrs. Duggan
and the children well and that you
will be comfortably fixed the rest of the
time you stay in Columbia.

Must stop now. Will try and
write again in a few days and
give you any "gossip" I run on
tape. - With much love from the
Moors to you all - your son -
as always
moon

Can't tell you how much I
appreciate your attending to the
cultures for me. I am in for it
deep - the mushroom business. I mean,
and any thing which will help make it
a success means a lot to me.

Kingsfield,
King's Heath,
Birmingham
16 Nov 1881.

Dear Duggan

Heartiest congratulations
on your marriage today! May
your married life bring you
continued happiness and prosperity!
My first knowledge of your en-
gagement was the invitation of
Mr & Mrs Robertson to your
wedding. The invitation arrived
on the 12th so that in view of
the imperfections of this machine
& other modes of locomotion it
was quite impossible for me to
be present at 6.30 today. Do you

back with me a nice collection of
pathological objects & parasitic fungi.
Poor old Harty! I was awfully
shocked & sad to find his
'Tobacco-Pipe' awaiting my return
home last Monday. I left him well
in August. He died very suddenly.
How many happy hours he and I
have spent together during my
long stay in Munich. His nature
was very kindly & honest. It is
indeed sad to me to think he is no
more. During last year I several
times thought I shall be his last
friend. Alas it is his case now. Harty's
day's work was however done and he
has left a fine record behind him
of honest & successful work.

I have a great deal of work at
the Birmingham University. My

duties began on October 1st. I fear I
shall have little time for research for a
long time. I am ^{some 3 months} ~~over~~ in Italy for a long
time last spring - 5 weeks in Naples.
I finished my work of last year and
got out some further & curious results.
The drawings for my album ~~are~~ ^{are} ~~about~~
are finished. I met Hermann von Schenk
at Munich. He is very keen on the
destruction of wood.

Hoping that you are much en-
joying yourself and that Mr. Duggan
is doing likewise, with kind regards
I am

Yours sincerely
A. W. Reginald Buller

P.S. Do you still wait for specimens of common
European fungi? I have now collected & so
could send you a few. Have you any Pyrenopeziza confusum?

know that I am now Demonstrator
and Lecturer in Botany at the
Birmingham University? I am
afraid that if the aforesaid flying
machine or other mode of locomotion
could have ensured my punctual
arrival at East Aurora that the
University authorities could not
have given me leave of absence if
we also throw in a little imper-
iousity I think my list of excuses
for not being present at your wedding
is unusually strong but in excuse
go. Please therefore accept them in
addition to my good wishes. I hope
that someday you will again visit
England - this time with your wife and
that I shall have the pleasure of seeing
you both.

I left Munich in August & brought

Clatsop Mill, N. Y.
WOODS HOLE, MASS. Dec. 16-07

My dear Duggar.

I should be very glad to have you try your experiment of shipping cultures by express, as you suggest. I see no reason why they should not come through in good shape, and it certainly will be more satisfactory than having them come by freight. I may have been taking a risk on the first lots coming by freight, - but I think there will be ample time. Will let you know as soon as they arrive.

I do not plan to spawn the house before Jan. first, and it may be two or three weeks later before I am through. There is no point to having a crop before March first as the price in Jan. & Feb. is invariably much lower in this part of the country. Now I think to the florists who spawn under flower beds in November. By the first of January they throw great quantities of poor quality mushrooms on the market and the price doesn't get above 35¢ until after March first. Have I not written you of the cooling device I have perfected which on test this summer kept a large house at 60° or below, - in the outside temperature ranging in the nineties? It looks like Willis Moore's ice & salt stone hollow, - doesn't cost anything to run and is very cheap to install. Naturally I am not publishing the thing broadcast, but I shall be only too glad to tell you all about it. I hope to see you in the future.

but days have struck us, so I must go into details now. My chief worry is however, that I can spare next July without danger, and have a crop for Sept. Oct. and part of November.

If you care for blue prints of my mushroom house I would be glad to send them. They are nothing startling however and with the prospect of your visiting them "en long" perhaps you won't care to bother. It is a pretty big house 103' x 36'. Six beds on the sides and six (double row) in center. Plastered throughout with adiantum plaster, cement floor. Lined with building paper and matched boards outside. I have gone back on underground houses of any description. They undoubtedly are all right for some, but not for me. There is nearly 12,000 sq. ft. in the above house. 11,375 to be exact. Would you mind telling me in your next letter whether you consider 150 tons of manure ample to fill such a house. That is about what I figure it. But I would be glad to have you check it.

I am glad you found your family OK. and hope they won't lose the good effects of the summer while in Columbia. Would like to see a match game between your boy and mine. From your description I think they must be much alike. Mrs. Moon intends to visit Mrs. Duggar before long. I like - she hopes - and I think has some reason for getting your family here on your way to Ithaca. The only idea I have about your successor at Mo. is that Count Bessy would not fill the bill by long odds. If he goes there I predict he won't last three years. Thomas would be an excellent man, but I think he has his eye on something more to his liking. Allen I know nothing about but his published work. How does it happen that ^{the only man} ~~the only man~~ ^{is not} being strongly considered.

Digitized by the Hunt Institute for Botanical Documentation

ILLINOIS COLLEGE
JACKSONVILLE, ILLINOIS.

October 18, 1907.

Professor Benjamin M. Dugger,
Columbia, Mo.

My dear Colonel:-

I thank you very much for your information about the microscopes. We have gone ahead and ordered some from the Spencer Lens Company.

I saw a note somewhere, I think it was in the Alumni News, stating that you were going to be at Ithaca. It was after I had written my letter and I got the impression that you were already at Cornell this fall. Accept my very hearty congratulations. I know you will enjoy life on the old campus.

Give my cordial regards to Mrs. Dugger.

Ever sincerely yours,

Charles H. Rammelskamp

*I knew of the one little Dugger, but not of the
two. Accept my congratulations on that score too.
C.H.R.*

Water Mill. N.Y.
Nov. 5-07

My dear Duggar.

The box
of spaw arrived in
good condition to-day and
I am greatly obliged for
all your trouble. It is
mighty nice looking and
ought to insure a fine
crop. My cultures turned
out very well, - is decidedly
the best I have ever made.
I shall be interested in
seeing how the yields
compare from the two lots.

I shall begin making
bricks at once and will
plan to fill the house about
January first. It may be a
little later as I am not
anxious for a crop before the
middle of March. My plan

gravel and Whitcher's business methods
I am not calculated to make our thing.
as I think he must begin to feel the
difference. I know personally of one order
for 20,000 bricks which was cancelled.

Shayne has put up 16,000 sq. ft. in
addition this fall. He made a trip to England
last summer, and in consequence has
gone back to English spaw. So using it
almost entirely in his beds and is pushing
it to those who buy spaw of him. Suppose
he has more money in it some way. You
know the English spaw (so called "gun culture")
got down to 5 1/2 cts. retail. My experience in the
past was that it wasn't worth 5 1/2 cts. a ton.
The regular English spaw was pretty good as to

is to run through April and
May with possibly a week in
June if the beds are still
yielding well. Will empty
and fill and be ready to
spawn by July first if
possible. Will hope to keep
the house cool enough so
crop will not begin to come
before September first. This
will enable me to catch the
best prices.

Mushrooms have been
low this fall. It was a remark-
able year for wild ones in
this part of the country and
the wild product really
affected the market for the
first time to my knowledge.
Knocked the price from \$.50 to
\$.45 in no time. They have
creaked back to \$.65 now.

Now what I can learn
Whitcher is about knocked
out in the East. The St. Paul
spaw was so much better last

yield, - but the mushrooms
are small and light. Nothing
to compare with any one of your
varieties.

The failures in the business
have been greater than ever
this last year. I know of several
cases where they were absolute.
Some growers who claim to know
say that 75% failed to make
expense of putting in crop. This
seems large and 60% is perhaps
smaller. Yet when you make
allowance for the liars who
claim to succeed in the business
and for some reason always
greatly overestimate their results,
it may be that 75% is just far
off. Certainly it is far from
going a long way to see a
house which yields any
thing like what it should.

We continue to enjoy life
down here and should the
mushroom business fail out,
I don't think we will care to limit
any other abode. Certainly not.

while the children are small. It is the greatest bliss for them we could ever hope to find. They live out of doors, eat like farm hands, and sleep the sleep of the tired and happy. Harriet often takes a nap from an hour to two hours long and she gets better hours at night. Mrs. Moore churns to-day - getting about a pound and a half of butter. We have cream for every old thing in our table and are fast becoming confirmed country folks. A thing I never would have supposed possible in my case - as I know nothing about country life and never supposed I could stand it. Somewhere I go to New York - I come back tired out and quite ready for the little house a quarter of a mile from a neighbor.

John M. Coulter will have the "teachers course" at Woods Hole for six weeks & summer. Lyman & R. B. Gates will look after the House and fungi

Maxon will be collector and I will do some heavy standing around. I hope you can be down for a few days after the Agricultural Summer School closes. Thomas, Sraimmer, Smith, von Schrenk, Coulter and yourself - constitute the "Investigators Staff".

Don't know any botanical news. Haven't had time recently to see any body or learn any thing. I got Bicknith his job at North Dakota and now Skibbard is worrying the life out of me to get him away from Washington. The desire to see fastidians now does not seem to wane. Have heard from Fairchild and Woods recently, but no news. One thing that is very marked to me - don't know whether you have seen enough people from the Department recently to notice it. but as far as in the old days

it used to be "Woods this" and "Woods that" - now it is absolutely nothing but Gallaway! Even Skibbard speaks of having to wait to see Gallaway about this and that thing, - now mentioning Woods. There must be a big change in things.

I shall be interested in knowing who succeeds you. Should think the thing would have to be settled soon.

We were delighted to receive the photo of your boy. He certainly is a fine looking youngster. Hope we may have the pleasure of seeing you and your family on your way to Ithaca. Mrs. Moore and I thought you might like to have some place to leave Mrs. Duggar and the children while you got things settled. Will you go right down shopping - or can you find a place where you can board satisfactorily with the children?

I have not received any bill for

those cultures yet, - I say nothing
of the freight bill. Please send
every thing in the future by
express collect. It would be
too late for any thing to come
by freight.

I am looking forward to
seeing you in Chicago, altho'
I can't tell whether I will be
able to get away or not. It may
happen that the mushroom
business will be at such a
stage that I can't leave. I
hope not however. That will
be the only thing which will
prevent my presence.

With love from us all to
"you all" - I am

very sincerely,

Ernest Innes

9 Dec. 12-01

My dear Duggar,

I am wondering whether you got my letter relative to sending the bricks from the St. Paul Co. of which you wrote? Not that it makes any difference, except I am afraid you shipped them and they have gone astray. Since the Long Island R.R. lost a car of marmos for me and it took them a week to find it, I am naturally watching up small packages.

The marmos is all here and comfortable well. I think I will fill in about a month. It is a matter such as we have been having, it will be ready sooner. My bricks are doing fairly well but had some trouble getting them just right and am inclined to think that next time I will try making up enough from cultures in bottles to span the whole house.

I began this several days ago when I really thought I had something about which to write. But after my various carpenter jobs, tending fires, feeding the stock, bossing the hired man and numerous other stimuli which engage me in this rural life, I seem to have lost the inspiration. We have had a big nor'easter storm which kept me busy for a couple of days holding the rope. I think this must be the place of which Stevenson wrote when the natives asserted each other with the exaltation "Buzzy, buzzy" instead of the usual "Good morning". We all seem to be thriving as it however. The children are absolutely well. Eat as much as a grown up and will soon outgrow all their clothes. x x

Dec. 21st

The electric lights went out just there and since then I have been to Boston and New York. Indeed I would not send this sheet, - if it were not as an evidence of good faith, - certainly not for publication.

And that reminds me. I was surprised to see the preliminary announcement of the M. B. L. in *Scinner*. The copy I prepared was for the regular circular which does not appear before March or April and I thought it would be all right to put you down as at Cornell. No one is to blame but myself, but I hope it didn't cause you any inconvenience.

I have picked up various bits of Botanical Gossip in my travels recently, but they can't be written now. What I am writing for this day is to say that it will be impossible to see you in Chicago. I have expected all along to be there, - but the situation is just this. A very good friend yours in N. Y. has been ill with *hemiplegia*, and

his little daughter is likewise just
recovering from a severe illness.
They are not picking up as they
should and we have asked them
all down here to see if the air
and change won't help. Mrs.
Moore is anxious for me to go to
Chicago, but with our children
and the other responsibilities of
the place, I am not willing to
leave her with such a hospital
on her hands. I am mighty
sorry not to attend the meeting
- and most of all not to see you -
but it is the only thing to do this time.
I was particularly anxious to talk
to you about that book for Henry
Holt. I am depending on you
to do the fungi you know. It will
not be hard however as the subject
matter is general and not technical.
The way I will do when it comes
to a point which requires a lot of
work to get into shape will be to
lean it out. There is more than can
be gotten into such a volume any way.

and the chief difficulty will
be deciding what to eliminate.
I have written you, haven't I, the
number of words, something about
illustrations etc? If not let me
know and I'll give you the infor-
mation.

Mrs. Moor has a little Christmas
package for Mrs. Digger but is in
doubt when to send it. Will you
drop me a card giving the Chicago
address. I know you are rushed
to death these days, so don't try to
answer until you are settled.
Then to quote the immortal Bradley
M. - "tell me all about it". By
the way, you ought to have Jerlon
hold forth on the gentleman

But I must stop. Excuse
haste, - I was bound to finish
this this time. With sincerest
best wishes for Christmas and
the New Year to you and Mrs. Digger
and the children from all
of us, - as ever,

Evriste Flahault

Ingenieur des Arts et Manufactures

ARCHITECTE-EXPERT

présente à M. Duggan son Atlas

11, RUE SAINT-DENIS, ORAN.

ami M. Pott, américain
d'origine, qui doit faire sa
connaissance.

Son très dévoué

E. F. F. F. F.