
Questions

Experiments



DAR 206-1

Gower, Progn., & Hospital, p. 12

Maer, p. 13

Questions on Jul. 1842. -

Shrewsbury, p. 14

Kenilworth (2nd time), p. 14.

Falke and Smith, Dr. H. Mand, p. 16
10. (a)

~~Bechnipter - Gould, p. 17~~

~~J. Gray, p. 18~~

~~Jard~~

~~Bytt, p. 19 - M. Met~~

~~J. Gray for Gowers ... 20 & Breder~~

D. Booth: R. Brown, p. 21

Horticulturists, p. 21 - 23

Exton, p. 22

Schomburgk, p. 21

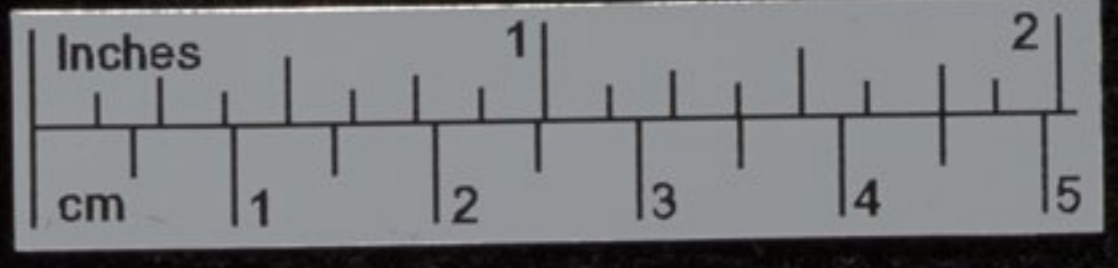
Jordan Smith, p. 1

Lucy Lewis, p. 16

Brown, p. 17

~~Hooker, p. 18~~

M^r. Whitley. Newlands Lynton Hants. Habits of different caterpillar races.
- name of Station who sold eggs -



206:1

Tenzoy Invention

DAR 206:1

(

1 When the Duchesse described Atarim
allude to J. D. Howard

~~Indian Smith of Indian Hill - character of the
extent land-shells of Madeira - abundance
with disheart for recent ones - I find
some recent but few fossil (perhaps not at all)
? are there any very common recent ones not
intended?~~

~~Do the Jane Parrots feed amongst the Indians
Do the Savages select their dogs~~

Towry { Does individual shell or insect of group vary
Colonists } more in one country or district than in another?

Character of shells of Sandwich group
{ Towry mentions Cardium. Is it recent, true of other
species

Harker says the species of Aquilegia vary
much - their spur & Ranunculus in
the nectar. The former best for
of experiment or solution.

Caterpillar 1846



1. Experiments in crossing or Plants

- 1 Repeat the French experiment of Carrot
- 2 { also try Primrose + Cowslip in rich soil & propagate from their seed
3. To apply pollen of different genera & then some hours afterwards of being related plant & see if just pollen produce any effect, as in case of woodpecker & Hen. returned by Mr Knight 1814 Hort. Transact.

May we not suppose, that certain plants, like Aphides & parasites in particular young ones, & that it is in these that male organs (not being always useful) fail - Really good subject for experiment to repeat following Brassica on side flabs & on other one flower

(5) Dr Fleming. Philozop. of Botany. Vol 1. p. 427 - says bicolor. white-flowered & scarlet Lychnis can be propagated by cuttings. - Try. - Important as in every portion of seeds -

(6) To hybridize every flower on melon & see whether fruit affected. Mr. B. seems to say impregnation ~~caused~~ of some seed, caused symmetry in cone - ^{above} That explains apples on side near the tree being affected. - does one branch of Cabbage being impregnated affect the branches - The French Apple tree ^{with abster. stamens} answers first question in negative. -



Questions Regarding Plants.

(2)

1. Uniformity of hybrid & Mangel offspring
2. How low late varieties of Peas or been obtained?
3. Whether the viviparous species & others produce flowers like the Oxalis for C. / food the material of M. Herbert in VA & V. Hort. Transact. -
4. Are any varieties of Cabbages not attacked in bad years from Caterpillars.
5. Whether Roses ~~interfere~~ ^{can} ~~each other~~ ^{be raised distant & sent} when close plants together: Do Haycock - Heart case.
6. - Do all species of wild Roses run out each other very much. - Do not some one weather another?
7. Are the wild Bananas of Otaheite seedless; are all varieties seedless - if so. how have varieties been formed?
8. Can any annuals be budded with reference to extension of age of individuals -
9. Do plants in becoming double ever become monoecious - losing one sex & not other. which generally fails first? - ~~that~~
10. Whether sepals same - double flowers are those whose stamens are numerous, how then can seed ever be made?
11. Is not non-flowering purple common in Norway



3/ Instruct regarding Breeding of animals

If two half bred animals really alike be selected
with offspring be uniform. - R. Ford

Her. M. Sagret written on copying of cabbages, parted I (as if oral)
Deandalle in V. Vol of Hort. Trans. & M. Sagret is referred to with ^{S. Herbert} doubt

Do fruit-trees sport much in nursery gardens?
as to in the ground much manner

The species of dove genus is more than three families shown
occurs in relation with species, ^{by Herbert} known see notes

In varieties of them any difference in offspring
from A into B - from B into H. as takes
place in mules of horse - important.

The crosses does make offspring take after male parent &
vice versa

= History of Tortoise-shell cats, as only one sex so abundant = I have ^{wh. was female} grey cat with tufts of tortoise-shell
on back.
Length of whiskers in Persian cats, in ^{toothless} Bengalians - J. St. Wilson says length differs in
different cats. -

Good observation - examine skins of hybrid animals in comparison with
Weight skeleton of Game Duck & Wild Duck, & their weight these
wing bones & see if ulation is same - good birds effects
of fatness.



Experiment in crossing animals. — or

4

To cross some artificial male with female of 1st breed & see result. — according to Mr. Walker

(1) the form of male ought to preponderate; according to Mr. Zundel the latter ought, either in first breed or permanently. —

Cross two half-bred animals. which are equally alike
(2) & see result —

Cross the Esquimaux dog with the hair leg Prophan or Persian
(3) animals of different hereditary constitution, & see whether offspring is fertile. —

Does the number of pulse, Respiration, period of gestation
(4) differ in different breeds of dogs, cattle, (Indian & Common) or length of life.

~~Does any of the above any case of produce a slow pulse~~
(5) brain heredity.

In the last 1000 years how many generations of man have there been.
(6) on what principles calculated — in order to prove how many generations in man. in proof of effect of crossing.

Are the Eggs of the Penguin Duck quite similar to those
(7) of another Duck? in Redgum?
Mr. Miller said yes with regard to former



4 (a)

In form of globe of Wood in allied species similar - if not

(8) has in it in allied varieties

(9) Crop largest Malay with Bantam - wide egg like
then Bantam. - Crop common Ind with Dorking

(10) Statistics of breeding in Ind. Gardens - with respect to condition of
animals & their general health - Foxes, Bears, Badgers -
How far wild animals are propagated, their value as show & curiosities!
What is price of fox, then Badger or a x...

(11) Keep. Junco nigres. crop them with the best. -

(12) About the blended content

Raise seedling
Summer of various
(1) That
(2) ...
(3) ...
(4) ...
(5) ...
(6) This is fact
always takes
place in
natural hybrid
& crosses
(7) ...
700/ { Expen
with
form



Raise seedlings
summed & various
with corn. as effect?
and silk caterpillars

Experiments - Plants

5

- (1) Shake a sleeping Mimosa, or half dead Mimosa
- (2) between sensitive & sleeping species, & see whether operation can be given
- (3) Do the stamens of *C. perispermus* collapse during sleep & do of *Berberis* (the latter I think certainly not)
- (3) Sow seeds & place cuttings or tubbs in several different soils & temperatures & see what the effect will be - with seedling ~~very~~ much more than cuttings or
- (4) Raise annuals or common English plants in H.K. & see what effect on organs of generation
- (5) Place pollen of Red Cabbage on ^{mixed with orange} flowers of other cabbages & see whether there will result hybrids -
- (6) Dust flowers of one brand of cabbage with pollen of other, count seeds, & see how great a proportion springs up true.
- (7) Sow ~~dry~~ seeds of wild cabbage in very rich soil, will plants abort? does it require successive generations to acclimate them to such soil. - Sow weeds in such soil.

This is fact
always takes
place in
natural Hybrid
of cabbages

(8) Experiment on Mimosa seeds - it really is an important case - crops with crisp pollen - as there are wild varieties. Is any intermediate form found wild?



(8) The *Leptosiphon densiflorum*, ^{an annual} closes flower ^{sleeps} on all gloomy days. → The ^{garden} *Coronella* also sleeps on ditto -
Cover them ^{up} periodically & see effect

(9) Carry Bees, packed with starch & Carmine & experiment on their returning power - then carry them in electrical machine, reversing the poles & see which way they fly. -

(9) I have which been covered with honey-dew dusted with pollen / visiting grafts =
Spread sheets of paper covered with some sticky stuff in flat places & see whether wind, ^{or wind, by} ^{flowers garden on ground walks} with drift may seeds - necessary to answer Welford's doctrine of Equivocal Generation Chartwell p 377.
Have paper ruled in square to facilitate investigation. Copied in middle of ploughed field - on hills. -

10 Short tann duck on pond with Duck-weed - cork. water-hem - examine dog, which has swam - on pond & river - every head of seed must be distributable - Examine stems of pond for seeds. -

11 Soak all kinds of seeds for week in salt sulphuric water. -

12 Plant two rows of Cabbages near each other & enclose one ^{rows} of each in bell-glass - sow them seeds & see if they will come up true - whilst others are cropped. -

Are Bees guided by smell - or sight - touching Mr Borne they of insects like Orioles -
- crown flower - put artificial flowers - also do with honey - Fruit Orioles =
How many flowers - minute to the visit?? good = !!
Examine pollen of double flowers. compare with single & see whether grain placed, as Kocherle describes.

Mr Sparrow after feeding on oats, give food to Hawk & saw pellet. ejected.

Examine pollen of such flowers as do not seed or seed early - Magnolias. Wyalas
a plants grow under unfavorable circumstances as the water in glasses etc



Experiment

~~Diadema encarnis~~ Plants

(6)

In the common Fig *Diacorus* - are its female flowers always barren - if not ^{male female flowers in same receptacle} does impregnation take place

(8) Make Duck eat Spawne, eggs of snail, mix of fish + kill them in one or two Place. Sugar-Dragee. (I have seen one mentioned)

By Father made them eat Holly-seed
Horn cast
+ the girls

(9) Fox glove + such like in very rich soil - as they have little tendency to double; what would be effect -

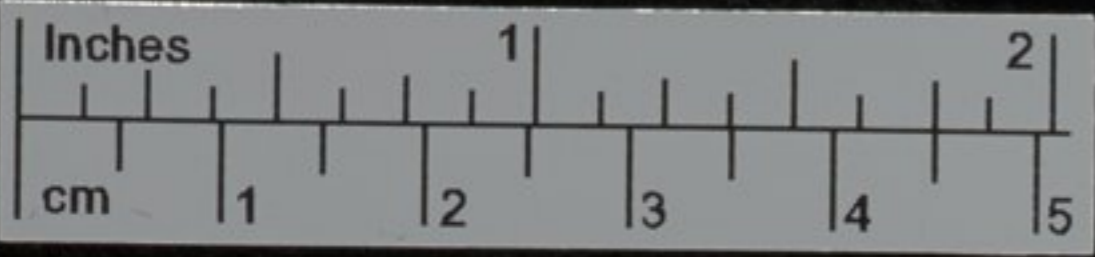
(10) Try in low many generations. daisy. Fever-fuge Groundail. - gilly flower with break + become double. - This is a double grow-foot. or *Paeonia ulmaria* =

(11) Try. mixture of Soda. Salt. Gypsum. Magnesia Iron Rust Carb. of Ammonia - from Urine or on opposite plants. when proportion mixture appear equal - + see whether proportions will vary, which will show the real proportion, & effect of Chance

macro.

(12) Take Bag of soil from ^{especially if det of wood be present} center of woods, & other odd places + see what plants will spring up. which will show, how seeds are transported, or how long they remain dormant. if kinds come up, all found in wood.

but seeds
ultimately
springing in
woods.
of birds



13. Mr. Herbert says Crosses are very difficult
to crop - are then races - if we plant them
together & raise seed - In letter Mr Herbert
says so about Anthus.

(14) Examine pollen of those genera of which wild
hybrids have been formed.

(15) What is history of Viburnum or snow ball-tree, what would result from
seed being sown =

See in Cultivated Plants, in Pentstemon, which have abortive
parts, whether such vary.

= Go Beech so to Sweet Pear, unipolaris, for
if so, as there can be raised true, then
is no crossing of Beech.

Character of
and Entomology
remains difficult
(2) Any
last
not
(3) How
As Pap
(4) As Pap
may be
Museum
takes
(5) It is
of var
Elms
Elms
(6) wide
is very
order
get
(7) When
leaves
Home



Herbarium

Character of algaria Flora of Jama del Fuero
(1) and Embryos of - most important, as further
removed sp. the point. - ? series in intermediate country

(2) Any known changes in Flora of country during
last century or two - when agency of man
not known.

(3) How in Tris impregnata; which part of stigma?

(4) As Papil. flowers appear opposite to cups, are there unusual
many species in genera of Leguminosae. - Herbert explains
numerous spec. of Cope Heath of faculty. ? Knight
takes opposite view.

last year taken
of the present
from his on
very high will to
cup.

(5) It is most important to ascertain amount
of variation in plant raised by Simon, as
Elms. or or - I have some reason to suspect
Elms of no other case. -
Orchidaceae plants

(6) Wild plant accustomed to rich soil, when placed
in very poor flower, but not fruit - - Do not
orchards become unproductive from poverty of soil. -
get into probably would grow there

(7) When parts of fructifications retrograde into
leaves - is this ever effect of want of nutrition. -
formed organs so? - Yes, my father lost the
character in get degree from
charcoal & sand test ment



- (8) Is bees
orthoph
thy u
- (9) In
cabbages
leeds
If ut
ut
mingle
nut
Vari the
- (10) Is m
impegn
funes
separat
- (11) Nut
Specimen
- (12) at ha
artifici
- (13) Do any
same
H. se



(8)

2 Cucumbers at / doors.

(8) Do bees frequent Cabbages, much - or the minute
Orthoptera - important, as we know how easily
they creep -

(9) In the nurseries, where ^{seed of} the varieties of
Cabbages, peas, beans, is raised, do the
seeds ever collect at all from the plants?
If not, I am surprised ~~how~~ such plants do
not degenerate, - as the Bees will
mingle the inferior and varieties which
must occur. Is it then inferior and
varieties which counterbalance each other?

(10) Is number of pollen-grains necessary to
impregnate ordinary number of seeds known? -
Linnæus has shown that each pistil is covered with
separate divisions of pollen? -

(11) Must pollen grain be whole, to impregnate? -
I presume of stigma impregnate.

(12) At Macæ Cucumbers in frames are not
artificially impregnated. Alford says Ants - Esquimaux

(13) Do any of same species of willows grow in
same situation & flower at same time, has
H. seen growth of different species growing



White Mullein good plant to sow + try to get other species

~~see also~~
 if not
 feel sure
 more of
 such a
 (14) At the
 (Barrow) ~~farm~~
 hollow
 (15) Was for
 (16) by call
 when in
 (17) Catch
 + see what
 what stage
 on Bees
 (18) Place
 made for
 when
 (19) Key
 (20) as Ho
 since
 about for



near close to each other - As they are dioecious,
if no hybrids were produced by seed, we might
feel sure, that pollen of our kind is much
more effective than of foreign - Eyles has
such a grove of Willows. -

(14) At what distances from males, will female
(Barnon female branches) ^{some poplars}
Willows or Jewo produce. -

(15) Will you find fruit without insemination. -

(16) Any calculation of number of grains of
pollen in any one flower

(17) Catch Bees, Butterflies - Syrphus - Heligethes
& see whether they are dusted with pollen - in
what state (whole or broken) is ball of pollen
on Bees thighs

(18) Place pins beads with Bird lime near
male yew tree & see whether they catch
pollen - ~~Do~~ In another bush. -

(19) Heavy of mork flowers in Hydrangea

(20) as Hya is dioecious - seedman who
saves Hya-seed - he has something
about propagation of plant he says see



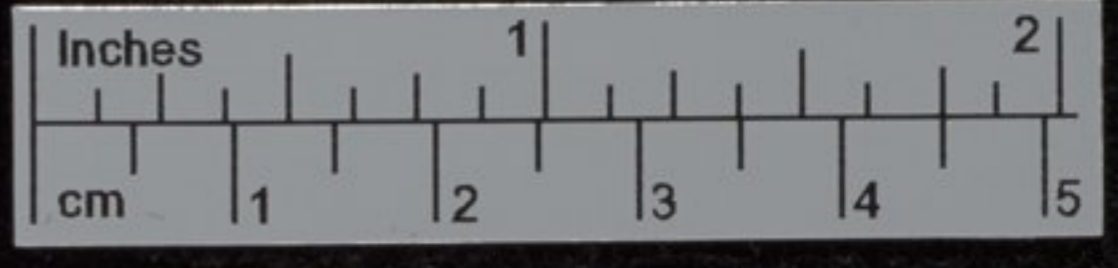
(a)

also Vinca,

Mercurialis - Frog Bit, Valerian - Urtica
 dioica - Sorrel. Fuchsia - Budder
 Brom - Eranis all these, are they
 much frequented by Bees or Butterflies
 or little insect? or is pollen existing
 minute or abundant? Do they seed
 plentifully? Look for isolated female.
 Also any plants which are from
 seeds to be sowed & all monocot
 plants.

Hooker says Ruffaria - Dianthus & others must
 be carried by some insect.

(21) Are there
 plants
 (22) What
 seeds have
 include
 is eaten
 Rescued
 (23) Talk about
 Fly -
 (24) Do Bees
 visit
 (25) Does the
 all va
 (26) Is deer
 in Calth
 or f. a



(21) Are there many instances of single clumps of plants in countries, as of rare green Cotton Plant - How large ^{area} clump there? Distinguishable from ~~the~~ clumps from other parts? I'm says Irish, Scotch & English plants generally distinguishable. - What structure of seeds. -

(22) When Linnæus says so per centage of seeds have contrivance for transport, does he include seed food to eat. (even here Vanilla is eaten by a Buceron in East Indies - *Arctostaphylos*)

(23) Talk about *Dryas*. Horned Oranges. *Spallanzoni* Eggs - Figs. - ^{2. kind of flower generally} Penwinkle (not *antipoda* ^{in fruit})

(24) Do Bees distinguish species, they do not varieties. - ^{white}

(25) Does the yellow Butterfly deposit eggs on all varieties of Cabbage.

(26) Do deer keepers cut the head - *hermaphroditic* as in Cattle in Chillingham Park - What Bark on *varieties* or of deer. Contents of testes. -

Urtica
Butcher
any
Butterfly
then explain
to the seed
to separate
from
hermaphroditic
then much



10 a
 2. 30) ^{before last} March 1842. Last year beans & peas were
 planted in rows adjoining & seeds gathered
 there were planted ^{last year} felt small, without sticks
 & seeds gathered & there are now to be
 planted this year

Copied

Gulls.

Number of species of Birds in New Zealand, plants so few -
 Range of mundane genera, ^{in Birds} in accordance with range of species?
 are there any fine doubtful species from Van Diemen's Land? or New Zealand?

Babinston about differences of Irish & British species & British
 & distant parts of Europe.

Gulls - go over the Pigeons, Phalaris, Linnæus, Alcyon, when there are very
 close species & see whether they come from "it" or different
 parts or same extent.

About ~~undulating~~ wandering species of confined genera

By my theory in relation to rising islets, there ought to be a good many ~~new~~
 doubtful species; how is this at Canaries Arch - it is so at Felipe's is. -
 Ireland, doubtful genus -

Does any genus of Plants, vary & hard to separate specifically in one country & not in
 other: Rose is hard in Europe, Walnut in America. - Heath in Africa? are there genera
 less difficult, in other countries, when species are either numerous or even when few
 are they constant: this very important for it is to show that such variation is not
 a generic or specific character, but contingent on country. - How is it
 in *Delilla* or *Oyster* or *Helix*. Or does any species of plant, vary in one
 region of Europe & less in another region -

(27) What say in
 under of se
 Kenlow Sp...
 similar man
 (28) Can any ar
 a cutting
 G. Knipf
 (29) Are there
 closer to
 the & see
 name there
 cannot be
 of very mi
 (30) Get Alber
 & Kidney Bean
 to what hi
 (31) Ask Hen
 place in h
 greater
 (32) Can Hen
 about what
 raised -



(27/)
annuals &
fastener

Whid say is Mules generally fails - perhaps
indexed & secondary characters - in South flower &
Henslow speaking of Thyme South about stigma in
similar manner ever failing. -

(28/)
gr. flowers
sup. gen.

Can any annual or Biennial be grafted
or cuttings taken or tuber - talk about
Mr Knight's theory with them too. -

(29/)

Are there races of Lupine, Stocks
Clover, to experiment a & grow near each
other & see whether they can be obtained - I
name them three plants, because they
cannot be crossed, I think, I expect, except
by very minute insects. -

(30/)

Get Alberley to plant single Peas,
Kidney Bean & Bean, ^{without sticks} intertwin'd, in a space
to show Mr Herbert's theory on the subject

(31/)

Ask Henslow for list of annuals to
plant in H.A. house to see effect on
progenies years of great heat

(32/)

Can Henslow ask question of Ch. Le. Couteur
about wheat - change of soil - copying when seeds
raised. - His Bill. -



32. Combs which from Egypt ripe in Scotland?

to show acclimatization.

July 1842

When nettle leaf put into spirit, poison drops exudes - does not elm. Does it in ^{Scusa} Melon - Anchusa ^{Campanula} or ^{L. thymum} Blue globe - it is not possible to see orifice of poison-tube - so put camomile in spirit + then experiment: for gradation in structure

Verbena
Compare flowers of wild + tame carrot - Parsley + Fennel.

Compare flowers of different Cabbages most carefully to see if variation equal in flowers with leaves - Show terms

How ^{early} do characters of leaves of different vegetables & animals come on - Compare cabbages. Compare young beans. cabbages.

History of Pheasant-fowl. Here almost like cock-pheasant: will not to sit on own eggs

Flowers in short turf. for abortion. or for sterility

Land Birds Mediterranean migratory - ask for
and h. Iceland as Arctus leucurus
ask Sullivan about Falkland Is - Snipe
migratory - partly winter of Land + S. America



(33) Ornithogalum communi but imperfect called
Canadense - was it grow in open air in
Sweden. Linnæus found 2 flowers which had
afterwards unopened, did not become infertile.

(34) Any recent information about pollen
of Scabularia

Royle & Horsfield

(35) Talk about races of Bananus & get
settled - Also about Sugar Cane
Edwards says does not seed - ^{Some say it does}

2 Royle's ^{Productive}
Books no
information

Royle & Horsfield about Silk worms. Varieties
effects of Immitation - said to require isolation
ask Mr Green to ask Mr Herbert how many
generations any hybrid has been reproduced
itself -

(36) ask Gray to ask Mr Philby to
experiment on hybridizing peaches, for
the back to back

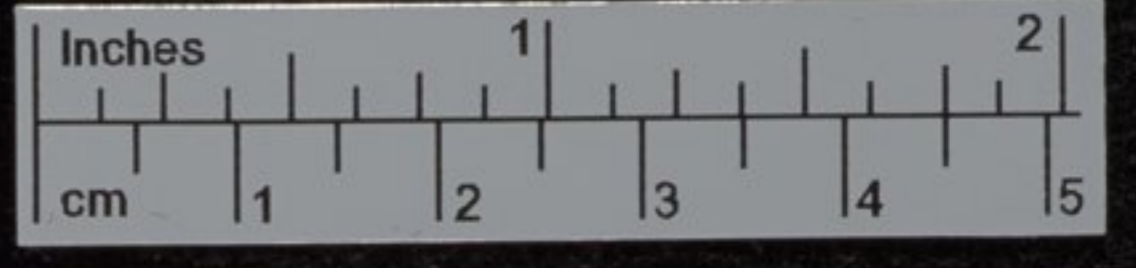
37 Ask Lykes patches of new European animals in India?
[about chetah - other ^{same} animals not breeding when taken
in India - ^{does not} about gako. & other hybrids - ^{left} see

38 Does only male gako cross with cow? is not reverse possible??



[Blank lined page]

Ma
1) See this rec
seed in be
Pies done
2) Result of 88
3) —
4) Does the
every year
5) Examine the Parnassia
when the buds
6) The i apple was
2 near end of orch
7) W. L. Parnassia
Bladder-bird
Cattle apple
on account of Van



Mass

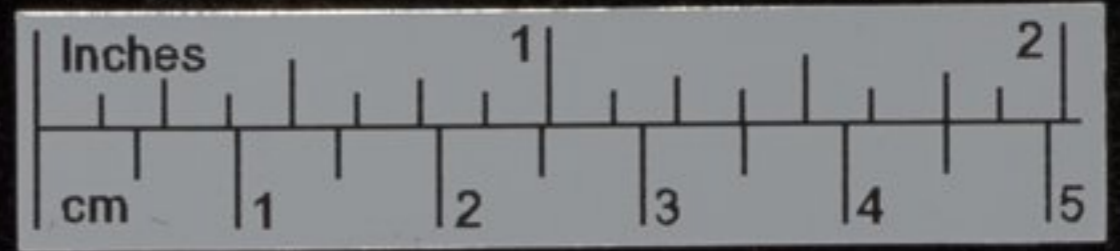
any male branch.

- (1) See trees near Boat House - number of seeds in beginning of November 1841. -
Trees above male?
 - (2) Result of ~~Edwards~~ experiment in Cabbage
 - (3) ————— in Heartsease given
 - (4) Does the ~~Thymus~~ ^{withing garden} tree at other station every year to ~~spring~~ ^{Yes}?
 - (5) Examine the Parnassia when stamens move one after the other to flower (a Parnassia when pollen bursts before flower is open -- No)
 - (6) { Tree in apple with brand in middle of tree with flower near end of orchard = At Shanty on bank of Pond - flower later. -
apple & accident??
 - (7) Med. Rhododendrum seeds??
Bladder-knot H. Saburum H. Dode cathion H.
-
- Castles apple & pear & sex of pollen naturally carried, on account of Van Noes cross - Also peas -



N.B. I think very likely the Pear & crop ought to
 be placed far from all other Pears, from Wiegman

There
 Pear - Beans
 Pear - Beans
 Let the book
 of the 1st part
 Pear - Beans
 Figs, Pear - Beans
 of the 1st part
 a list of them
 Weather
 About the year
 Belong to the
 one had no seed
 seeds of various
 the 1st part
 from collection
 One of the names
 is unpopulated
 the 1st part
 the 1st part
 has planted seeds of
 has with about
 although has a root
 and large asparagus
 will plant some
 to see whether it
 is a deal - set the



copy right to
as from Viegman

This must be Perry's G. & A. S. C.

- (14)
- Shewsbury to be compared
seeds alone remain kept time
- (1) Peas - Beans - Cabbages - In experiment (30/11)
 - (2) Less Beans germinated? - Yarrow test
 - (3) Set 4 by hooks. races. - Herbert's fact =
^{planted & known to be}
^{^ Iselin's division answers the question =}
 - (4) Effects of bit of soil under Bees
 - (5) Open man Home orange -
 - (6) Figs, pines. Rapier Alone. (as it is up to in up up)
to rest finally. As describes - Flowers not setting = Put part of boiled carrots
in tin of iron = Am st to be planted at some method
 - (7) Water of Water well =
 - (8) Abtute Pine seeds? Linum flavum ^{put in spirits} which plant seeds?
 - (9) Belms fruit itself hybrid seed
 - (10) Seeds of warm peppercorn in water will the seed? -
one had no seeds, 2 had plenty of seed & there
 - (11) Abbey has planted seeds of pea green Gros Apple.
from cultivating lost their horns
 - (12) Due the horns orange wh never has seeds produce pollen? So
is impregnation refusing to fruit, become well shaped & care
 - (13) From before pollen in shed are you had the dist into
the for the flowers? Can the seeds from the flower -
 - (14) Has planted seeds of Geranium precium. small white - flower
var with abtute stems - do they or hereditary?
 - (15) Abbey has a hooked Pea. intend to breed for its - failed
and large Asparagus; result? to germinate
 - (16) Will plant some of the Pine with abtute stems of Terrace
to see whether stems will be produced in individual plant
 - (17) A deal - settle in that - house. with it seed? -



Alberdy says that some Bees are smaller & more numerous
 like try to get me some to look at: - Was one of them
 a hive of these small Bees - at Sundome he says Bees

July 4/44

Mark has six days' puppy of small Blue Bull-Dog - length
 from nose over head to root of tail $28\frac{1}{2}$ inches. From
 sole of foot to shoulder on line of back, height $17\frac{1}{2}$ inches.

The Greyhound was in length (measured same way) $47\frac{1}{2}$ - in height 30 inches

Examine keel of Common & wild Ducks - Black Duck & Puffin



43. Any power of Kelling Ilexian or Macosian, beside the latter
at Galapagos - Ilexian. - Cases. - We may presume little spreads
of seeds =

44/ Foster. Has he seen it in flower? Does he know ^{of the} ~~Poland~~
who does - ~~Walter in Pippin Bennett says in the State.~~

45. Harbottle vol II. p. 670 - oats cut down turning into Rye. -
on Citrus

46. Books describing amount of ^{on Citrus} ~~the~~ variation? ~~Hebrew names only~~

47. Ficus carica, ^{Menola fusca, fusca, fusca} Pigeon - tridua. (are fruit forms ever productive)

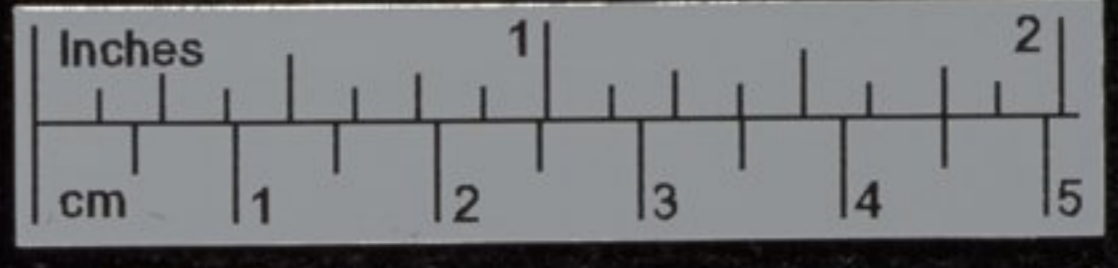
Smith says many trees in Indies are of this def. -

(48) ^{multitud} When first of spontaneous Hybridity to see whether any Populicarian plants, - whether say more
or Ilexian plants, or any with peculiarities of structure sending up impugnant difficult or scarce

(49) ^{Geometria de fructu} List of seeds for wood cut - ^{Geum, Galium Persic.} double knots - simple knots, curved spines - simple
spines - or seed-cases with similar structure. = good "can a showing
how single, but beautiful adaptation might be arrived at. = My book with drawing of seeds.
Anemone with leaf - Bull Rush - Sandalwood - Sycamore - seeds with border - a Humboldt's spinning seeds.

(50) Any cases of wild varieties plants growing together under same conditions - like
Crostich & ~~prunella~~, but leaf strong marked.

31. Plant seeds of the Fuller's plants, Teazle



When on tooth about, do you know
relates of traits in germ.

D. H. Ward; B. J. Diller. Andrew Smith 16

any hereditary in milk teeth
in heritable!! my son
any hereditary in the male
family

are exp- both, or other accidents of delivery
in heritable? Behd w- accounts

any new cases of diseases, generally occurring
in man being transmitted through females, like
Hydrophobia - How are they? Some organs no answer

Andrew Smith, about tame wild animals breeding at
the Cape. - #. about two var: of Lion: Amule des Sauciers

(4)

Participating of female, relation to healthiness, or fetter

(5)

About exp- bred races of men taking after sex, A Smith.

Andrew Smith

about species of Rhinoceros, becoming rare beyond limits
of the distribution of each - cause? -

(6)

~~Do signs in the Gallia del Reprod...~~

(7)

Do Hemorrhagic tendency, independent of hereditary cases, more common
in man than in female -

(8)

In thump-back even hereditary

(9)

All the works of Berhove (history of hereditary diseases) translated.

(10)

About Daltonism in the male Troughtons. Paper in Taylor's Scientific Memoirs

(11)

Andrew Smith passages at Cape any selection of males in
or in killing the worst = or in dogs =

(12)

Do Hottentots generally resemble each other by blood, more
closely than Caffres =

13

What are there any medical Statistics, proportion of
diseases (hereditary?) in diff. countries in same races



Mr Gray General Questions

Sett (1) ~~Particulars about~~ ~~some~~ ~~General~~ ~~etc.~~ ~~taking~~ ~~books~~ ~~know~~ ~~nothing~~

It is very important to know, whether Gould's observation
is good, that in the mundane genera, the
species are less wide range - ^{Plants??} In the in
ask him to introduce me to some human anatomist.

Over. are abortive organs as ~~teeth~~, more plain in
my Phisology or ~~Wells~~, than in ~~Sto??~~ ^{cases} ~~Is there any in all~~

How he dissected any animal after, which he abortive bone?
I see it: abortive ray, according to Benthams' Remark.
Have a cow. - degree of ridges of ^{latic} ^{spicula} : in mean any
~~false ribs~~ ^{abortive bone???}

as to ~~Coocytes~~ - ~~Instituted~~ ~~bones~~ ^{Wing of Aptens} : clavicle in - ?
Combs in ~~combs~~ ~~Pauling~~ - ~~Teeth~~ in ~~fatal~~ ~~state~~ :

Mr. Horns on his ~~Remembrance~~ ~~Scottish~~ ~~Quieren~~, when men & women
have long worked, whether children, who have not ~~done~~ ~~but~~
have any peculiar configuration -

~~Metaphysics~~ ~~of~~ ~~morphology~~ - Schelgel is he serpent man? about zone
separated by ~~non~~ ~~white~~ ~~space~~ : can he ~~permitted~~? does he understand
English - ~~Inquest~~ to collect facts for me - what? What
does Blume say on alpine flora of Java?

Has Schow written on ~~drift~~ ~~vegetation~~ & ~~where~~? How are
current & winds - Antarctic ocean: are they from West, like
a between Australia & S. America? Sabine says north
of Siberia, no sea currents, icebergs, trade of wind.

Aug 11. Hilain Bot. p. 787. position of embryo in three species of Hilian ~~stem~~
differs greatly - how very interesting to see if any variation in varieties.

L. H. Hilain law of Balancement



19

M. Blyth

Get description
write to.

- (1) Mentions some breeder who raises many English birds with young wild ones bred as well as, as those already bred in cages.
- (2) Does he believe Stanley's fact of Hawks including live mammals
- (3) Do most Hawks eat stomachs of finches - do they throw up pellets -
- (4) About hybrid pheasants breeding - any treadee? *

Differences in habits of different breeds

Is there any difference in breeds of cattle + sheep in the springing of the horns. At different periods in different breeds - ?? or is individual case: subject to disease in youth. -

M. Met - about selection for milking - loss of early habits in Dorsetshire sheep - migration of warts - variation in horns =

{ The egg calf ~~turns~~ sometimes turns into fine beast. would it? }
{ offspring bear egg calves, also turning into fine beasts. - }

{ For comparison with hybrids, is offspring of short-horn bull + hereford cow similar to reverse cross - }

{ Some cast-up balls of Hawks or even owls. - }
{ How long do seeds remain in stomach of birds }
{ How many miles they fly in few hours }



Zoological Soc

- (1) Do the animals then, sometimes couple but not conceive: Bears / yes /
- (2) Foxes + English animals + birds breed
- (3) In cases where lions have bred, have they been raised from young ones, bred in captivity - Mr Miller says Wombroolls were about fertility of ap-zebu-cow =
- (4) about callosities on camel-horses. as Rhinoceros =
- (5) Crop - See Barytrypsa with tame. -
- (6) About fertility of Bantam for different countries =
- (7) Do the Peacocks crop = Young Chinese or Pouter Ducks in very young state for skeleton =

Does the tumbling of pigeons vary in manner & perfection or not - if so probably a variety, not specific character =

Crop Pumpkin seeds + Dorking fowls, - or tailless dogs & fox, to see whether the characters are then intermediate or ^{sometimes} all on one side, as in crossing varieties

Amongst varieties crop one with obtuse tail or horn, with another & see result, in comparison with natural species, as domestic plants are crops



21

Says men
flowers
are different

R. Brn - while pollen art in any flower before stigma
expanded in reference to Lobelia & Clarkia - Brassica line
in vegetation. - Zosteria - Knight's notion of pollen &

~~stigma~~ generally not being mature at same time on same
plant - Flora of Australian Mountains - H. DeCandolle nothing for him

Does impregnation ever regularly take
place in unopened flowers - ~~not~~ disbelieves this in Bower case of orchidia
where for J. H. Kuhn was superior of "male principle of arrangement" would
not male or female "constructive principle" be better. or "constructive action or germ"??
improved

Flora of Normandy (one of the Celastraceae) stigma projecting pollen protrudes

Burby says ^{letter} no ^{pur.} - Ask about Pinks & Solanum in vegetation before flower open. Dr.
Has Ophrys nectar? = Where is Boeckhauser's paper on stigma
impregnation of violet? = Zosteria = the same plants in Wellington
mountain described in Thunberg = Alpine Australia Flora =
Banana's seedling - 20 varieties in mountains of Tahiti.

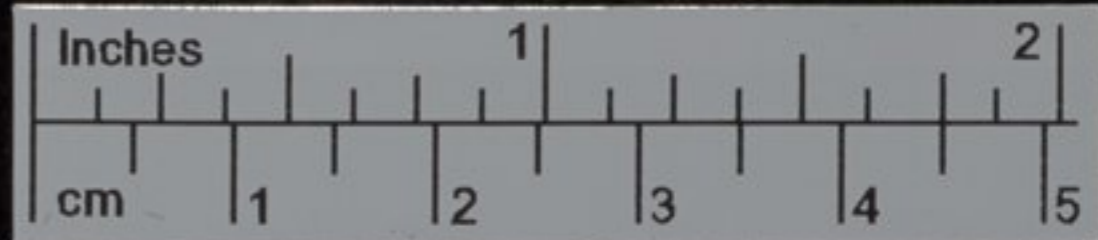
D. Booth - says canes from very ill differs - do they also differ in
different countries - on flora of Africa 1891

names of plants found on mountains of N. America similar
to European plants - will get answer =

2 pollen of collected Orchis + Asclepias & - carcosa? -
good

Kerfoot 2^d - gledits edocaine? applies to perhaps species
they - peachian fauna? } Australian Alps - are as European
form found there

Bradley says that of one principle



Horsethumb

- (1) are sterile? healthy: number of generation: about copying of plants; especially Populmonum etc
- (2) history of fruit trees far north in Scotland - do they flower - do they live healthy, if does fruit merely not ripen - The point to attend to is whether good + plenty of pollen is produced. + if so, whether conception takes place, the main fact of seeds ripening has ^{scarcely any} relation to hybrids. -
- (3) do seeds sport into neotamms (does reverse happen?) what is effect of crossing seeds or neotamms: same question with regard to Primrose
- (4) Do apples "sport" in fruit or time of leafing
- (5) Do the most cultivated show beetle-like produce as large capsules of seed, as the common kind -

Cattle are horned. Suff. We have ^{no} ~~abortion~~ horns of abortion, but sometimes have dangly ones. - Is there any genus of plants, which some are absent of abortion, but appears in abortive state either in the species, or in the individual of chance & under domestication. -

2. B. Bentham remarks, when parts of flower are reduced from normal number, they are apt to vary in number in cultivated of same species



22

Eyton

(1) Number of eggs of half-bred geese - inter se, & with parents & of Chinese geese.

(2) Anatomy of muscles of stumps of tail of dogs & cats. -

(3) Hounds - laying -

(4) { About blended instances of the geese which be
inbred, especially if the hybrid was reared with
either parent. -

May 44 These hybrids differ in colour of beak, taking after male & female parent. - both they grow up in the respect different? Important. -

Oct. 44 { Tell J. Anderson's statement of English Horses having
fewer vertebrae in tail, than continental horses.

- { About the leaping of Irish Horses, bred in this
country.

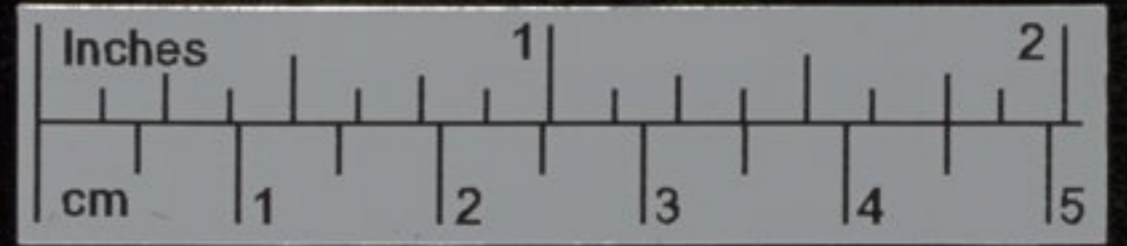
{ Chinese Dogs' head to send

Once examine Pea (& other Pea) for several generations

under net & see if get sterile -

Once the little Grass on sand-walk, as

what I think I have never seen Bee visit.



Experiments in Garden

~~Two stones of standard Epipactis grafted on white, & see what comes up.~~

& will parents

Epipactis...

which he
was fed with

ing after made
the respect

Horses having
mental horses.

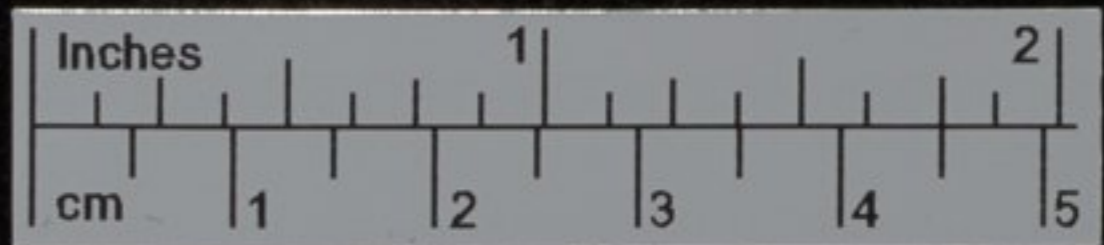
is this

(parent)

all, he
e visit.



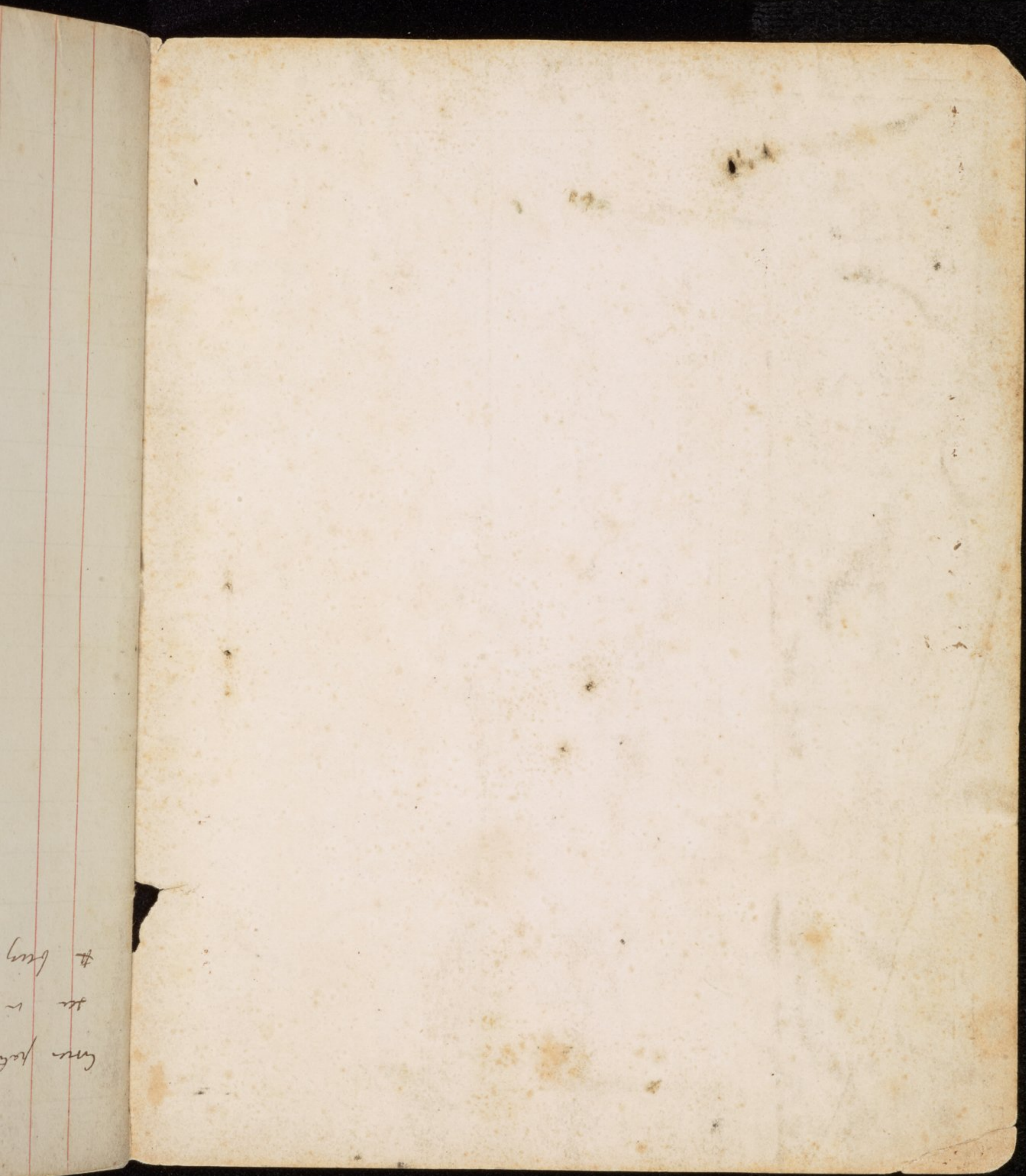
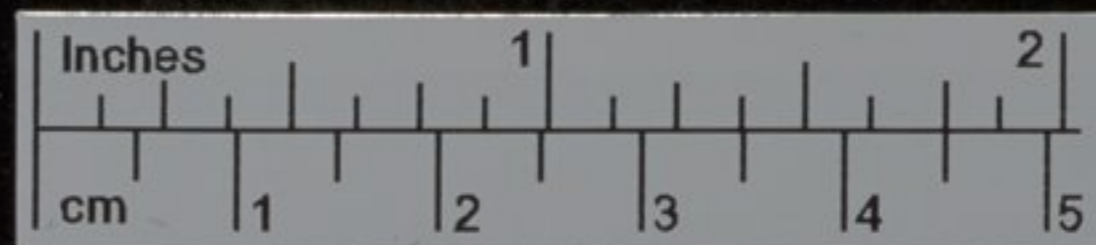
~~Experiment on small ... with some thing
(1) With an extract of yeast so to produce fungus
a certain substance - (Museum 40/A.823 deinde
analysis of yeast
(2) Museum 1810/A.777. Receipts and objects
Ripper & from ... with the ...
Petrifaction?~~



(1) W. H. ...
...
(2) ...
...



The first
 was held at Grand. with
 all other plants and
 # very full



ms. lat.
in
600

Questions

and

Experiments
