## Entries to be copied:

24	432
28	493
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84	1430
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222	
345	

19/11/61.

749 Larva (agnatic) Palpicornes Hydrophilus with Curions has tripartite showel on Red. taken in July 67 in W. Halleys Good on 91. Railroad troton see animal Kingdom by J. R. Junes 19 125

On the fly leaf is this note: "Balsam. Those wh have the number marked out were rejected Nov $^b$ -25 $^h$ - 1872. W.A.J. Do - Glycerine. Dec $^b$  - 17 $^h$ - 1872. W.A.J."

24	1861	Heads of mosquito, Sandfly simulium nocivum (no-see-em of the Indians) & black fly, Limulium molestium, sent me by E. Miles from the North Shore, Huron by letter & put up in Balsam. The saw cut ends of the Mosquito's piercers are prettily marked & the broad lancets of the Black fly are very clear.
25	1863	Spicules of Gorgonia. This belongs to the Protozoans. See Dana's Geology, pg. 163, fig. 149. It belongs to the Alcynoid polyps & the object consists of the ray or fringe (Sea Fan.)
31	1859	Hair of wild Rabbit sent from Penetanguishene by E. Miles. Sur
38	1859	Acari on the wings of grasshoppers. Thousands of Grasshoppers died this summer having sometimes a dozen of these little parasites on their wings, wh appear to have been the cause of their premature death. They became very weak & were easily caught.
53	1865 A:	fragment of shell with little shells attached: taken by the sounding lead by Capt I. Anderson Lat 52. 40 N. Long 5.38 W off Arklow Bank 12/1/62 in 35 fathoms. See Microscopic Journal No xxxi, evidently Lepralia.
82	1865	Sand from Lake Ka-Kwe-ambe-je-wag-a-mog: the rise the river Muskeka containing 80 or 90 p. cent of Iron.
84	1864	Sand from Princeton Mines said to contain 70 p. cent of Gold: (none at all.) given me by I.W.B.Fraser B.A.
85	1865	Fragment of shell of Sea Mouse, showing the spines, given me by E. Miles from the coast of Helgoland.
103	1860	Section legbone yearling colt belonging to I. Eagle, Weston killed by a Locomotive.
105	1865	Tooth of Masquenonge, long. 1 section fish taken in Pigeon Lake weighing over 1bs 30 by E. Miles
122	23/1/65	Zaphrentis bilateralis a diagonal section, the structure is very pretty as seen with a watchmaker's eyeglass, or other low power, the specimen was among small stones from the North Shore of Lake
	Sketch	Huron & in shape something like a pear. Nat. size see Dana, pg. 236. It appears to be a radiated Polyp & is better see in a larger specimen wh I obtained from I Noble's well.
153	20/2/65	Dry seeds of Echinosperma lapulla, picked in mid winter still attaching themselves to everything that touches them. Growing on the dry gravel at the Vestry door of St. Mark's Ch. Carlton.
178	3/4/65	Teeth of a minute borer found in willow twigs. A curious tooth

wh looks like a cross & occupies the whole of the front of the

head. (Balsam)

No, Date

- 204 20/4/65 Equisetum showing a spore with its club shaped filaments spreading.

  If this plant be examined before it is too far advanced, by
  putting a sporangia in sight & pressing it, the spores will be seen
  throwing out their filaments as they leave the sporangia.
- 222 25/5/60 Stomach of the grub, called the brown grub (shewing some fine tracheae) that eats off the cabbages & voraciously. The stomach is a large sac followed as usual by a small contracted end, wh in this case has very strong muscles without any teeth visible, dipt in carmine, mounted in Goodby's sol."
- 244 1/7/65 Stomach of Elator occulatus, dipped in carmine, washed in Glycerine, washed in Chlorate of Zinc & put up in the same.
- 264 7 7 65 Eggs of months the reddish brown caterpillars that appear about the last of July on the apple trees & currants binding many young limbs together by their webs & working only inside eating off only the chlorofil & leaving the veins of the leaves. These eggs appear to be covered with hair & feathers of a white moth.
- 329 5/1/66 Pulex sciurorum, squirrel flea.
- 239 11/3/66 Egg shells, in the folds of a piece of Pine bark from a newly felled Pine stump. M- Peake found them. Lids very beautifully fastened down.
- 345 13/4/66 Sphagnum, pretty & curious cells, Carpenter Edi 3rd pg 386, boiled in potash water dipped in Iodine Zinc & put up in Glycerine.
- 384 18/6/66 Leaf of moss (Dr. Bovell took it)
- 395 26/6/66 Dryocampus senatorius, external surface, vagina. Very large yellow eggs inside the abdomen. Abundance of trachaea. Neither stomach or tongue, that I could see. Might this surface be necessary in order to give position to the eggs when deposited.
- 420 12/7/66 Chaetophorae. These grew while in the saucer in my window & are in glycerine in a thin glass cell.
- 432 28/7/66 Wing cover & musical organ in Katy-Did or Phylloptera oblongifolia.
- 435 30/7/66 Saws of Saw fly that destroys the current bushes. See notes.
- 487 25/12/66 Fossil human bone from quadalope, put up by Topping & given me by Arthur.
- 493 16/1/67 Aspidiotus conchiformis, or "oyster shell bark louse". For a description of this little destructive thing see Harris pg. 254. & Practical Entomologist at pg. 31 of Vol ii: where there is a good drawing & description.
- 494 16/1/67 DO DO these were taken off the apple branch where they are usually found: & along with them on slide NO 394 are some of the jet black eggs so plentiful round the buds of the Berberry which grows along side. The eggs are perfect & are not yet hatched: what they may do in consequence of being in a heated room I can not tell as yet.

- 502 22/1/67 Section transverse (immediately at right angles to the long bone (femur) of a blood horse about 7 ys old: once the property of Mr. Peake. Horse died in 18 (very good) (put up dry)
- 22/1/67 Crocodile scale ground by Osler, ground through (dry) 505
- 506 22/1/67 Longitudinal section of bone of a cat, brought from the Pyramids of Goza (dry) supposed to be 4000 years old. The bone was given me by Dr. Booth.
- 538 11/2/67 Longitudinal section from the dense & thin part of wild goose's leg.
  - A. Dense part Put up dry. B. Blood vessel beautifully arranged. Given me by Dr. Bovell.
- 539 11/2/67 Transverse section leg bone of wild goose in Balsam as the sketch in 538.
- 549 12/2/67 Section of the nut shaped bone in the inner portion of the Beaver's ear.
- Transe Section Human Fibula. This bone must have lain many years 550 12/2/67 in the ground: it was taken from an Indian burying mound at Woodbridge C.W. put up in inspissated Balsam (changed to balsam, pure)
- 556 16/2/67 Native silver. Mr. Peake brought a little earth from Dysart to test. The blowpipe melted it immediately. The little balls are malleable & the residue is frosted like silver. A little ball, a flat piece, & frosted bits.
- 557 16/2/67 The above boiled in nitric acid & allowed to dry. (Polariscope.)
- Earth, from the Township of Snowdom 16/2/67 a good supply of Silver (notim) Given me by Dr. Peake. He got it from the Company.
- Grubs or borers, under the bark in young pines cut down about a 561 19/2/67 year: from Dr. Bovell's, pretty feet like teeth at each segment of the body. In Balsam.
- Lower extremity of one of the fangs of a Cow's molar tooth. 565 28/2/67 Transverse ground by Jimmy.
- Transverse section leg bone of a cat very thin, dry. Cat was killed 566 on the Railway Track during the winter. Very pretty. & finished by Jimmy.
- being used in the himself Long. Red Oak. Plenty of dotted ducts, 567 Ch. Seats. Very open wood.
- Long & trans e sections of Red Oak. tolerably thin, shew well. 571 1/3/67
- Transverse sectn leg bone of a 2 yr old Heifer hind leg just below 7/3/67 the hock joint. Fresh bone, put up dry a curious instance of absorption.

- 582 7/5/67 In glycerin these insects were feeding on a beautiful bright scarlet fungus. They appear to be the self same as 583 wh were floating in a small pool. They seem to be all snow fleas:

  Podura's. Those in the water were reddish brown, their skins cover the water; when Nit ac. is put on them they spread their tails.
- 587 9/5/67 Cylindrocystis brebissoni? These desmids were formed in a ditch on the Railway at Weston, they seem to be attached below by a whitish mucous membrane & fringed on the edges with bright green. Dry & balsam wh has split them in two.
- 621 4/6/67 Erect threads of alga? clipped from the back a snail, living in Draparnaldia in Chafers Creek, Diatoms numerous.
- 627 11/6/67 Vaucheria. racemosa? in a still pool
- 2ygnema. found in a small pool, quite exposed, & floating; back of H.I.Boulton's; while crossing to the 6th Con:of York. In different stages of conjugation.
- 650 2/7/67 Mongeotia, genuflexa? taken too late, in the pools about the Humber at the Lake on the shore.
- 661 17/7/67 Pteris aquilina: gathered in the garden where it had been brought with cedars for the hedge. Brake, or braken.
- 664 20/8/67 In spirit & glycerine &c.
- Felt from the mouth end of a little scale looking thing attached to the flat rocks at the falls of "ontmoreney above the falls. Are they water spiders?
- 674 10/9/67 A must on Red oak leaf, picked near Mr. Dennis' swamp while getting cedars to plant.
- 677 25/9/67 6 fleas, kept about a year by Arthur. Very good. one male, 5 female.
- 698 13/xi/67 Struthiopteris, a pretty sample gathered on a little creek that empties itself into the Humber at Edw Scarletts.
- 749 7/i/68 Larva (aquatic) Palpicornes. Hydrophilus, with curious head, tripartite shovel on head. Taken in July.67 in Mr. Holleys pond on G.T.Railroad Weston. See Animal Kingdom, by I.R. Jones, p. 125.
- 750 22/i/68 Mould. Portion of a large flat fan-like growth or mould attached to pine joists, under Carlton Church, built on dry gravel; with brick walls, & no air underneath. About 6 yes. Given the floors began to sink. Seen as an opaque with an inch obj. the little cells of the pine threads of growth are very pretty.
  - 754 28/i/68 From a Caddis work, taken in Alga under the ice 21/i/68 in the Humber. Glycerine.
- 819 21/11/68 Larva of Gyranus natator? in Balsam. The most beautiful lines of tracheae I ever saw. Balsam has made it too light.

827 29/11/68 Batrachosper mum confusum, sent me by W Osler. in Hautz -Alga, Zygnema nitidum? this was sent in a bottle to Dr. Bovell 842 taken from Cattleguard G T. R station (in Hautz fluid. Cytoblast very perfect. 861 22/iv/68 Stellate bodies from leaf of a Nympha, probably alta or tutia in the Humber, Balsam 862 Same as 861 in glycerine Same & diatoms given me by W. Osler who drew my attention to them. 863 - 11 864 22/iv/68 Encyonema prostratum, in Gly. given me by W. Osler Diatoms from London (by Osler) Bal. 958 11/4/68 22/x/68 Aphis with white down attached on Beech twigs (Bal) always swaying 998 their tail end about. curious (Balsam) 1044 19/xii/68 Tracheae of mouse, given me by W. Osler. Gly. beautifully stained. 19/xii/68 Intestine of mouse vill. Gly. 1045 1046 11 Auricular plate of frog. Gly. 1047 Muscular fibre of frog, "temporal" 1048 Mesentery of Cat. 1049 Costosternal cartilage of puppy 1050 19/xii/68 Muscular fibre of frog. temporal. These from 1044 Inclusive are stained & in Gly. & given to me by W Osler. 19.x11.68 1057 21/x11/68 Muscle from Pine Borer, stained & acetic Gly. in Gly. by W. Osler 1066 30/xii/68 Diatoms on a bit of weed in the ditch wh runs along side the Cedar swamp, containing Sicmophora, bacillaria paradoxica, Exillaria &c - In inspissated Balsam. Intestine, ovipositor &c of house fly wh came out during the thaw 1083 9/i/69 full of eggs. Gly. 1085 9.i.69 bone foetal lamb. stained in Gly. from W.O.

1105 27/i/69 Worms found floating in the ditch in the swamp Jan 25.1869.

evidently aerating. These have been in spirit & acid, then turpentine now Balsam. Very curious mouths & barrel shaped

abdomen.

Gomphonema berklii. this was taken from a bit of grass waving in the water of the Black creek at a cattle hole on the 5h Con. York, close by brick house Jan 27. 1869.

1150 11/2/69 Clelifer (Cancroides?) found by Mr C. F. M. who was bitten badly by something at night.

- 1164 23/ii/69 Simuleum molestum larva an attempt to open & separate or dissect one (Bal)
- 1171 27/ii/68 Parasites of Rosebreasted Grosbeak: with eggs. Glycerin.
- 1191 22/111/69 Diatoms, Meridion very little disturbed; from the Cedar Swamp.
- 1197 26/iii/69 Gomphonema Berklyii, from a spot in Sam Scarletts tail nace where the water does not freeze.
- The same in all probability, but from the Swamp, shewing how these things are hatched, so to speak at this season & in springs in the sunlight, both were scratched off chips or stone, looking a yellowish brown scum, with the water trickling over it about 1/2 an inch deep
- 1207 Manch, 1869 Acari. Two small ones taken from a woodpecker. Red head & white spotted, that stays with us all the winter.
- 1223 28/iv/69 Alga? Tindyredia F. in gathering from a horse trough on the road & hillside between Hamilton & Dundas, sent me by post from W.
  Osler to see water bears, did not find any. In Hautz fluid & sealed immediately.
- 1233 20/iv/69 Diatoms, from Sandy cove Lake Simcoe collected by (W.O) in 1868.
- Diatoms (The same () (W.O) Diatoms from head of Kempenfelt Bay, Lake Sincoe. (W.O).
- 1245 20/vi/69 Head cysticircus cel: pig given me by W. Osler Gly.
- 1260 30/iii/69 Diatoms, taken on weeds at mouth of Desjardin Canal by W. Osler & boiled by him shewing among other good diatoms the "Coscinodiscus armatus".
- 1266 " Diatoms from Niagara falls. Surirella (plentiful) W. Osler
- 1267 From Humber, Gyrosigmas. W. Osler
- 1272 7/10/69 Upper & Lower surfaces of leaf of Dentzia Scabia: picked while at Mr. Osler's, Dundas in September last. put up 5/xi/69.
- 1281 9/11/69 Bacillaria? Exilla? or whatever else they may be attached to very delicate Alga? in the stream wh gives rise to the creek at Scarletts (Edwd)
- Diatoms. Shewing state of at this date in a sunken barrel at the little house near H. Dennis. One of the springs wh give rise to the water in the ditches in the swamp. Some long cladophora as usual on the sides of the tab a kind of Cocconema in Conj.
- 1298 6/xii/69 These diatoms Surirella minuta were gathered as an oily scum on a little ditch from W. Irvines forge to the river on the N. side the road.
- 1314 8 /xii/69 Trichina spiralis (encysted) From a subject (on the table) at New York shews the calcareous deposit. Gly.

1315 8/xii/69 Entozoa? from mucus stomach of a bat. Both given me by W. Osler. put up by him. Novb 1869.

1316 Jan 5.1870 Tenaea: ova bearing segment taken from a Dog. Given me by W. Osler. Balsam.

Waly sker?

Diatoms, Gomphonema dich: gathered when walking into Toronto
with Willy (1): 6 - very cold. Just South of the Whitebridges
near Toronto on G. T. Railway through a hole unfrozen about 6
inches long, snow curled over it. - Balsam.

Taken generally from a bit of gathering under the Bridge in the field at Gren pond. Diatoms pinnularia gyrosigma .6°.

1377 Small yellow looking morsels of the same. (good).

1390 \ 22/10/70 Trichinina spiralis. from man at the Toronto G. H. from Osler. Gly.

1392 " Tenaea elliptica head protruded from W Osler. Gly.

1402 27/v/70 Ulcer, from leg bone, tibia T. Gn. H. March 20: 1869. given me by Arthur bone so soft as to be easily cut with a knife.

Referred to Paget in his Pathology.

1403 6/June/70 Echinothyncus? from the Catfish. both male & female Given me by W. Osler Glycerine. (See Cobbold)

1428 30/1x/70 Seeds of Gentiana fambriata & Gentiana both gathered the same day, walking with May to Carlton Church Sunday Oct. 16" 1870.

The winged or feathered seed is Gen: fambriata, the smooth round one is Gen:

1430 15.ii.71 Leg bone of a Crane, Hern, or Heron shot Sep<sup>t</sup> 28: 1867. Note

These two are ground on glass with pumice stone wetted & put
up with Balsam. See Qualy Journal microscopical science.

1437 ll.iv.71 Trigonocystic orbicularis? tricornis see Hassell plate lxxxiv.

I found these today at the Whitebridges on the G. T. Railway while walking out from town. They were in a little scum wh I put in a bit of paper. See sketch of this date to shew the different forms.

1441 12.v.71 Acarus of an Oreole, probably the Orchard Oreole.

Insects in a book - In the first page of Carpenter's Comparative
Physiology. This intensely cold weather seems a strange time
for them to be about. Unknown to me at this date, except by
sight. This stellate form, wh is often so plentiful in watery
collections is from the seeds of the Mullain collect about Oct.
1st - & see. 1873.