

this name is applied to *Pinus Sabiana*, *Pinus edulis*, *monophylla*, and *flexilis*, all of which are gathered for food in their respective localities, most generally where neither of the others grow; hence, in speaking of the "nut pine" of non-botanical travellers, we must take it to be the "nut pine" of the particular region he is describing. The seeds of the sugar pine are extracted by beating the cones with a stone, after scorching them to destroy the resin. The Indian climbs the tree, throws the cones down, which are collected and manipulated by his squaw at the foot of the tree. These bigger Indians (the lowest of the Indian races on the Continent), are great pests of the seed collector; for cut down a tree and leave it for a few minutes anywhere within hail of a wigwam, and you will be notified, on returning, to find an astute squaw and a brood of children disposing of the last of your collection, adding, perchance, insult to injury, by laughing a good-humoured laugh at your blank amazement. I lost the bulk of mine by a mishap of this nature, and never obtained another opportunity, as the "sugar pine," like others of its order, bore very sparingly this year; on many I did not see more than two or three cones. Still more inimical to the seed collector are the squirrels of several species; whenever a tree is felled they attack the seeds, and in a few minutes will clear it. They also run up the tree, cut off the cones, and, rushing to the ground, extract the "nuts." Then come the birds—a host in themselves—that, what with one thing and another, the collector has but a sorry time of it, and to obtain any quantity, even in good seasons, much activity is requisite. The wood of *P. Lambertiana* is so free from knots that shingles are made from it, and many a house in California is wholly "clap-boarded" with it without planing. It, however, shrinks more than any other wood, and is rather soft for flooring. In this respect it differs from *Sequoia sempervirens* (redwood), which, let it be ever so wet, will not contract. *P. Sabiana* is said to be too knotty to make good plank. The sugar pine is beautifully straight, but too "brash" for spars—independently of its not being found near the coast in any quantity.

267 (b). *Pinus, spec. (ambabilis?) Dougl.*. Tree of small height; but this immaterial, as it must be stunted from its elevation, on one of the spurs of the Siskiyou Mountains (8000 feet). Branches in whorls; cones bright brown color. This is sometimes called by the woodmen the balsam fir, from the blisters of resin on the trunk, &c. Some of these blisters will yield as much as an ounce of resin. I have also heard it called the silver fir, white fir, and occasionally white pine, though the latter name in the North Pacific territories is used for *P. monticola*, the ally or representative of the Weymouth pine (*Pinus strobus*), Sept. 1865.

267 (b). *Picea, spec.*. Found in the Redwood Forests near Smith's River. Sept. 1865.

268. *Labodinus decurrens*. Torr. (*Thaps Crostana*, Oreg. Com.). In Catalogue No. 3 I have made some remarks upon the synonyms of this species, regarding which, trusting to "authorities" (?), I had fallen into error. In my letter, written to you from Jacksonville (descriptive of my journey from the Willamette across the Cascades, via Fort Klamath, to Rogue River Valley), I have described this tree. It is seen into lumber in some places under the name of the "red cedar," but it is not a very good timber. It cannot be split into planks easily, as it is too apt to fly into ribbons. Like some of its allies (*Thaps and Cupressus*), it will last long if protected from the air by being under ground or in water; but *vice versa* if not. In this respect it differs from *A. Douglasii*. An acquaintance of mine in Southern Oregon (Governor Briggs) tells me that he put up a ring fence of this timber, but in two years it was so rotten that you could push it over. I found a great scarcity of seeds on this tree this year, though, from the remains, it appears to have borne profusely last year. This is true, as I have previously remarked, on nearly all the trees, with the exception of perhaps *Quercus Blainii*. Beets, which bore plentifully, and accordingly, in the districts where it grew, I heard the exclaimers talk of the fall of 1865 as a good "bar year"—beats eating the acorns and getting fat upon them—though the contrary was the case in the "chinchip" (*Castanea chrysophylla*) thickets, which bore almost no fruit, with an accompanying scarcity of "bars" in the neighbourhood. Trees of *Labodinus*, which last year bore profusely, here this year very sparingly, and in some cases not at all. From the day I saw it first in the Cascade Mountains, in lat. 42° 50' N., to the end of the season, I am certain that we climbed, cut down, or otherwise examined upwards of a hundred trees, yet I do not think that, after all our labour, we obtained more than a dozen cones, representing twice or thrice as many seeds, though the same trees produced last year by the bushel. Sept. 1865.

269. *Taxus*, sp. 25 feet in height; on a spur of the Siskiyou Mountains, on the border line between

Oregon and California (lat. 42° N.), Sept. 1865. Though gathered long after the season of ripening (June or July), I fear that, though sufficiently matured to spring, yet they are not fully ripe.

270. *Cupressus*, sp. 15 bags and 1 paper parcel. The largest tree of this species which I saw was about 100 or 150 feet in height, and 2 feet in diameter; subercent in outline, though no regular outline can be ascribed to it, as it differs in shape and size in different localities. Some trees are light green in foliage; others dark green, and might be mistaken for *Labodinus decurrens*, or, as Mr. Newberry most probably did, for *Thaps gigantea*. The shrubby clusters on the superior surface of the fronds, near the apex, or on the twigs, though not on the extreme apices of the branches; branches with an upward sweep, coming off from the stem at an acute angle; in older trees the branches have rather a downward tendency, and the middle ones project straight out, and never with the upward sweep, as on the upper part of the tree, and in young shrubs all the branches have a general upward growth; bark roughish, madder brown colour, like bark of *Labodinus*, though whitish epidermis; in young trees the epidermis is nearly white and smooth; the cones are shown on the branches upper and lower; male catkins yellowish; tree generally unbranched for 20 feet. I found this in the mountains of Southern Oregon in sunny exposures. This is most probably *Cupressus Lawsoniana*, Muir, which Dr. Cooper (Patent Office Reporter, 1865, p. 432) designates as the "Port Orford Cedar," though this is generally known to the California botanist as *Cupressus fragrans*, under which name Dr. Albert Kellogg has described it in the "Proceedings of the California Academy of Nat. Sciences," San Francisco, Part 1, and been lately introduced into England, though in most cases it has been distributed as *C. Lawsoniana*. I need scarcely say that, from its situation in Oregon, it must be perfectly hardy. *C. fragrans*, of Kellogg, is said to be principally found in the forests of South Oregon bordering on the sea. Notwithstanding the utmost care, I find that these cones and seed are, like many other species of conifers, affected by the larva of an insect, against which no care in collecting or packing can guard. This has been a source of great vexation to me, but your experience of similar mishaps will, I am sure, acquit me of any blame. Sept. 1865.

271. *Cornus sericea*, Torr. (Durand, Pl. Pratt. p. 80). On a spur of the Siskiyou Mountains, between Oregon and California, in lat. 42° N. A shrub 6 to 20 feet in height. Sept. 1865.

272. *Castanea chrysophylla*, Dougl. (*Castanea sempervirens*, Kellogg). Tree 60 feet in height; gulches near Canon Creek. Sept. 1865. Beets feed greedily upon the chinchip, and the old hunters talk about thickets of this plant as his "bar school." This is not positively a different species from the succeeding (No. 273), though the hunters look upon it as such. It attains the height of 60 feet, and 1 foot in diameter. Bark, epidermis whitish; sapwood tough and rather white; and the dura-wood hard and brown (true specimens); the nuts are much larger, and the leaves broader and less golden colored on the under surface than No. 273; the branches are nearly at right angles to the stem, and twisted and curved irregularly; branchlets at acute angles to branches; fruit near the apex. Canon Creek. Sept. 1865.

273. *C. chrysophylla*. Mount between Great Klamath Marsh and Fort Klamath. 4 feet in height. August 1865.

273 (b). *Thaps, new species*. A glaucous foliage, the cones, and general appearance of this plant, is quite sufficient to establish its non-identity with *Thaps gigantea*, Nutt. I therefore prefer to leave it without further description. I found the tree growing on the banks of the Willamette River in Oregon, not far from Portland, and was induced to collect specimens of it from its appearance being somewhat different from any specimens of *T. gigantea* which I had seen on the banks of that river. The period of its gathering was in May 1865; and though it was covered with old cones, of course there were none in seed. At the time I was busily occupied, and did not consider it distinct, having no specimens to refer to; but on subsequent examination, and a consideration of the fact that in all the specimens which I examined the remarkable differences were permanent, I concluded that it was a distinct species.

Mr Brown has also sent home specimens of woods, viz. Nos. 247, 251 (bark); 251 (two specimens of wood); 254 (bark); 268 (two species); 270 (two species); 272 (two species); also, dried specimens of plants, the seeds of which are either in this box or have been sent previously, with one or two doubtful species:—*Juniperus Henryana*, *Abies Bridgii*, *Pinus Lambertiana* (abortive cones), *Quercus Garyana*, *Pinus contorta* (male catkins), *Acer circinnatum*, *Quercus* sp., *Juniperus* sp.—no seeds.