

part of the Missouri, Arkansas, and the Rocky Mountains," and also collected by Lewis and Douglas "on the Oregon." Since that time true *P. nudicaule* seems to have been lost sight of, until it has now turned up from its original range, in the collections of Canby and Tweedy. The former sends it from Montana and Dakota (no. 152); the latter from the National Park (no. 85): Forms referred to this species are common enough; but we have not yet seen true *P. nudicaule* away from its original range "on the head-waters of the Missouri, etc." If any one can supply fruiting specimens of the so-called *P. nudicaule*, which is said to extend as far eastward as Iowa, we would esteem it a favor.

Angelica arguta of Nuttall, reported by him from Vancouver Island, has not been collected since until discovered by Howell in 1882 at the base of Mt. Adams, Washington Territory, and distributed as *A. genuflexa*; and then in 1886, along Hood river, Oregon, by the same collector, where it had been collected by Henderson (no. 382), in 1884, and also distributed as *A. genuflexa*. A fruiting head of this species was also sent by Tweedy from the Cascade Mountains, Washington Territory, mixed with his *A. genuflexa*, no. 280. Curiously enough, last summer's exploration of Vancouver Island by Professor Macoun failed to reveal *A. arguta* in its original station, but discovered plenty of *A. genuflexa*.

Angelica Hendersoni, n. sp. Very stout, densely tomentose throughout, especially the whitened lower surfaces of the leaves and the inflorescence: leaves quinate then pinnate; leaflets thick, broadly ovate, 3 to 4 inches long, 2 to 3 inches broad, obtuse, serrate: umbels equally many-rayed, with no involucre, and involucels of numerous linear-acuminate bractlets; rays 1 to 2 inches long; pedicels a line or less long; flowers white: fruit oblong, more or less pubescent, 3 lines long; dorsal and intermediate ribs prominent, lateral wings thick and corky, as broad as body; oil-tubes solitary in the intervals, 2 on the commissural side: seed deeply sulcate beneath the oil-tubes, with plane face.—Bluffs, moistened by sea spray, Ilwaco (Long Beach), Washington Territory, Aug. 5, 1885 (*Henderson* 2158).

Sanicula laciniata Hook. and Arn. is very much confused in herbaria with *S. bipinnatifida*, a good deal of *S. laciniata* having been distributed as *S. bipinnatifida*, as, for instance,

Pringle of 1882, and Jones 3149. The palmately parted leaves, spinosely pointed teeth and bractlets, yellow flowers, less prickly fruit, and sulcate involute seed-face of *S. laciniata* are well set off against the pinnately parted leaves, merely acute or but slightly pointed teeth and bractlets, purple flowers, densely prickly fruit, and broadly concave centrally ridged seed-face of *S. bipinnatifida*. Nevin and Lyon, in their exploration of San Clemente Island (off S. California), collected *S. laciniata* with pedicelled fruit, but in every other respect perfectly typical.

Sanicula Howelli, n. sp. Stems coarse, a foot or less high, more or less buried in the sand, bearing tufts of stout, elongated peduncles and leaves: leaves broad and palmately 3-lobed (often much modified by burial in the sand), the divisions rather sharply cut and toothed, the teeth mucronate-tipped: umbels unequally few-rayed, with involucre of a few leaf-like bracts, and involucels of very conspicuous bractlets, sometimes much exceeding the large globose heads of fruit: flowers yellow: fruit short-pedicellate, prickly all over, $1\frac{1}{2}$ to 2 lines long; oil-tubes irregular in number and distribution; seed-face concave.—Sandy shores, Tilamook Bay and Ocean Beach, Oregon, July 15, 1882 (*Howell* 16, *Henderson* 1584); also on Beacon Hill, Victoria, Vancouver Island, May 5, 1887 (*Macoun* 5). This sea-coast species is most nearly related to *S. arctopoides* H. & A., but the habitat of that species, its almost stemless habit, its leaves so laciniately dissected as to appear fringed, its fruit naked at base, and its nearly plane seed-face, are the more marked characters which serve to distinguish it from *S. Howelli*.

Phellopterus littoralis Schmidt, that curious sea-shore species, so much resembling *Cymopterus* in fruit, has had its range extended beyond the Oregon shores, where it has been collected by Cooper, Howell and Henderson, having been discovered by Professor Macoun in Vancouver Island in 1887.

Pimpinella apiodora Gray, of the Pacific slope, is a great desideratum in herbaria. It seems to be widely distributed enough, but very rarely collected. Specimens of it are very much desired by the writers.

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