divaricate branches at summit of the erect stem; leaves nearly all pinnatifid and softer, but setose-pungent; chaff of receptacle sharply mucronate, scarcely pungent: *ray-achenes dull greenish-brown, scarcely ¾ line long*, not compressed, though with angled face, more prominently and acutely apiculate, *the summit and back quite prominently and sharply rugulose, the whole surface obscurely roughened.*—Borders of salt marshes about San Francisco Bay. July—Nov.

+– +– *Disk-achenes with 3 or more slender linear paleæ.*

3. **C. rudis.** With the aspect of *C. pungens*, but only 1—2 ft. high, commonly branched from near the base, and the branches ascending, sparsely hispid-hairy and scabrous-pubescent, slightly resinous and distinctly honey-scented: earliest cauline leaves pinnatifid, all the others linear-subulate, entire hispid-ciliate, the margins in age revolute: *achenes of ray black, about a line long, strongly compressed*, semi-obcordate in outline, the surface nearly smooth, the apiculation infra-terminal and rather prominent, though short.—Sacramento Valley, near Vacaville, *Jepson.* Long supposed to be mere *C. pungens*, to which it bears a very close general likeness. But the disk-achenes have the pappus of the next species, and those of the ray are altogether peculiar. May—Aug.

4. **C. Parryi** (Greene). Widely branching, 1—2 ft. high, sparsely hirsute, minutely resinous-glandular, aromatic: lowest leaves pinnatifid, the cauline linear, entire, sharply pungent, spreading, the uppermost pilose-ciliate toward the base: heads scattered rather than glomerate: *ray-achenes dull black*, ¾ lines long, somewhat compressed, smooth on the sides, but with a few coarse tuberculations on the back: *those of the disk with 3 or more paleæ exceeding the corollas:* chaff of receptacle not pungent.—Plentiful about the warm springs at Calistoga; herbage with the fragrance of *Wintergreen.* June—Aug.

* * *Herbage dull and dark, ill-scented: disk-achenes with pappus.*

5. **C. Fitchii** (Gray). Stout, widely branching, 1—2 ft. high, villous-hirsute, somewhat viscid, more or less beset with stalked glands: leaves mostly entire, linear-acerose, the very lowest pinnately divided into about 3 pairs of linear-acerose segments: bracts of the involucre conspicuous, subulate; those of the receptacle soft, pointless, long-villous: ray-achenes obovate-triquetrous, light-brownish, obscurely if at all tuberculate, indistinctly angled; those of the disk with 8—12 linear pappus-paleæ.—Very common on plains and among the foothills of the interior. Aug.—Oct.

41. CALYCADENIA *DeCandolle.* Rigid strict virgate more or less hispid annuals. Lowest leaves opposite, the others alternate, all narrowly linear, entire, revolute; those of the axillary fascicles and about

MANUAL

OF

THE BOTANY

OF THE

REGION OF SAN FRANCISCO BAY,

BEING A

Systematic Arrangement of the Higher Plants Growing Spontaneously in the Counties of Marin, Sonoma, Napa, Solano, Contra Costa, Alameda, Santa Clara, San Mateo and San Francisco, in the State of California.

BY

EDWARD LEE GREENE,

Professor of Botany in the University of California.

[Issued 2 Feb., 1894.]

SAN FRANCISCO:

CUBERY & COMPANY, BOOK AND JOB PRINTERS, 587 MISSION STREET,

1894.