

INDEX TO VOLUME XIX

A

- Acanthis linaria linaria, 129
- Accipiter cooperi, 34, 135, 173
 - velox, 16, 32, 135
- Actitis macularia, 16, 32, 134
- Aechmophorus occidentalis, 133
- Aegialitis semipalmata, 25
- Aepyornis maximus, 171
- Aeronautes melanoleucus, 3, 163, 169
- Agelaius phoeniceus californicus, 60
 - phoeniceus fortis, 39
 - phoeniceus neutralis, 137
- Aimophila ruficeps ruficeps, 130
 - ruficeps scotti, 163
- Albatross, Black-footed, 167
- Allen, Amelia S., western robin and Sierra junco nesting in Alameda County, California, 185
- Aluco pratincola, 59
- Ammodramus savannarum bimaculatus, 24
- Amphispiza belli, 186
 - nevadensis nevadensis, 39, 138, 142
- Anas platyrhynchos, 30, 59, 133, 141, 143
- Anthus rubescens, 139
- Aphelocoma californica californica, 25, 60, 94, 95
 - californica cyanotis, 95
 - californica grisea, 95
 - californica hypoleuca, 95
 - californica immanis, 94, 95
 - californica obscura, 95
 - californica sumichrasti, 95
 - californica texana, 95
 - californica woodhouseii, 95
 - cyanea, 95
 - cyanotis, 94
 - floridana, 95
 - grisea, 94
 - hypoleuca, 94
 - insularis, 95
 - sumichrasti, 94
 - texana, 94, 163
 - woodhouseii, 94, 163
- Aphriza virgata, 101
- Apteryx, 89
- Aquila chrysaetos, 34, 162
- Archibuteo lagopus sancti-johannis, 135
- Ardea herodias herodias, 32, 134
- Arenaria melanocephala, 16
- Arquatella maritima couesi, 16
- Asio flammeus, 35, 136
 - wilsonianus, 34, 135, 142
- Astragalinus lawrencei, 60
 - psaltria hesperophilus, 60
 - psaltria mexicanus, 163
 - psaltria psaltria, 163

- tristis pallidus, 39, 138
- tristis salicamans, 60
- Astur atricapillus atricapillus, 70, 127, 185
 - atricapillus striatulus, 70, 103, 127
- Asyndesmus lewisi, 136
- Auklet, Cassin, 58
- Avocet, American, 32, 101, 134, 156

B

- Baeolophus atricristatus atricristatus, 164
 - inornatus inornatus, 61
- Bailey, Florence Merriam, birds of the humid coast, I, fishermen, 8; II, visit from a sooty grouse, 11; III, the center of a compressed nesting area, 46; IV, up the old wood road, 51; V, by the sign of the spruce stub, 53; VI, in the bracken, 95; VII, the band-tails, 98; VIII, a voice from the heights, 101; red letter days in southern California, 155
- Baldpate, 30, 85, 142
- Bartramia longicauda, 162
- Bittern, American, 57, 134
 - Least, 186
- Blackbird, Bicolored, 60
 - Brewer, 37, 39, 60, 62, 133, 137
 - Rusty, 173
 - San Diego Red-wing, 156
 - Yellow-headed, 37, 137, 156, 176
- Bluebird, Mountain, 43, 140, 152
 - San Pedro, 169
 - Western, 53, 57, 133, 140
- Bob-white, 128
- Bombycilla cedrorum, 41
 - garrula, 103, 128, 141
- Bonasa umbellus sabini, 168
 - umbellus togata, 32
- Botaurus lentiginosus, 134
- Bowles, J. H., the Baird sandpiper in the state of Washington, 25; the arctic horned owl in the state of Washington, 70; the winter migration of 1916-1917 in the north-west, 125; two new records for the state of Washington, 187
- Bradbury, W. C., notes on the black-crowned night heron near Denver, 142; notes on the nesting of the Clarke nutcracker in Colorado, 149
- Branta canadensis canadensis, 134
 - canadensis occidentalis, 16
- Bryant, H. C., stomach contents of an Oregon ruffed grouse, 168; review of C. A. Wood's "the fundus oculi of birds especially as viewed by the ophthalmoscope," 174

- Bubo virginianus algistus*, 127
 virginianus pallescens, 35, 126
 virginianus saturatus, 125
 virginianus subarcticus, 35, 70, 125
 Bunting, Indigo, 171
 Lazuli, 41, 61, 139
 Burnett, W. L., two albino English sparrows, 69
 Bush-tit, California, 150
 Coast, 61
 Lead-colored, 103, 165
 Lloyd, 26, 165
Buteo abbreviatus, 103
 borealis alascensis, 16
 borealis calurus, 34, 59, 135, 162
 lineatus elegans, 129
 swainsoni, 34, 135
- C**
- Calypte anna*, 60, 160, 161, 168
 Canvas-back, 85, 87
 Carpenter, N. K., western belted kingfisher breeding in San Diego county, California, 22
Carpodacus cassini, 138
 mexicanus clementis, 173
 mexicanus frontalis, 60, 138, 166
 purpureus californicus, 60
 Catbird, 41
Cathartes aura septentrionalis, 32, 135
Catherpes mexicanus punctulatus, 130, 140
Catherturus lathami, 88
Catoptrophorus semipalmatus inornatus, 134
Centrocercus urophasianus, 32, 135, 187
Cephus columba, 58, 71
Certhia familiaris occidentalis, 140, 143
Ceryle alcyon, 35, 136
 alcyon caurina, 22, 60
Chaetura vauxi, 136
 Chambers, W. Lee, early nesting of the San Diego song sparrow, 102
 Chat, Long-tailed, 41, 139, 164
 Chickadee, Chestnut-backed, 50
 Long-tailed, 41, 140
 Mountain, 41, 103, 133, 140, 164
 Santa Cruz, 61
 Chicken, Barred Plymouth Rock, 125
 Prairie, 135
 White Leghorn, 125
Chondestes grammacus strigatus, 138
Chordeiles virginianus henryi, 36
 virginianus hesperis, 169
Cinclus mexicanus unicolor, 41, 139, 169
Circus hudsonius, 32, 186
 Clay, C. I., notes on the California jay in Humboldt county, 25; a new record for California, 68; Del Norte county bird notes, 71
Coccothraustes vespertina montana, 21
 vespertinus mexicanus, 22
Coccyzus americanus californicus, 162
Colaptes cafer collaris, 36, 60, 136
 Colburn, A. E., the goshawk in southern California and Arizona, 185
Columba fasciata fasciata, 162
Colymbus auritus, 15, 30
 holboelli, 15
 Condor, California, 159, 176
 Cooper Ornithological Club, directory of members, 107; minutes of, 26, 74, 105, 147, 175, 189
 Coot, American, 32, 59, 65, 85, 134, 156
 Cormorant, Baird, 59, 71
 Brandt, 59, 186
 Farallon, 58, 186
Corvus brachyrhynchos hesperis, 37, 137
 corax principalis, 17
 corax sinuatus, 137
 cryptoleucus, 163
 Cowbird, 37, 38, 39, 137
 Crandall, Lee S., review of his "pets, their care and history", 146
 Crane, Sandhill, 44, 48, 134
 Creeper, California, 140, 143
 California Brown, 52
 Crossbill, 133, 138
 Sitka, 17
 Crow, American, 92, 135, 152
 Western, 37, 57, 137, 143
Cryptoglaux acadica acadica, 35
 Cuckoo, California, 162
 Curlew, Black, 157
Cyanocephalus cyanocephalus, 137
Cyanocitta stelleri annectens, 37, 137
 stelleri carbonacea, 137
 stelleri diademata, 163
 stelleri frontalis, 169
Cyrtonyx montezumae mearnsi, 162
- D**
- Dafila acuta*, 16, 85
Dendragapus obscurus fuliginosus, 135
 obscurus richardsoni, 32
 obscurus sierrae, 186
Dendroica aestiva aestiva, 41
 aestiva brewsteri, 61, 139, 169
 aestiva sonorana, 164
 auduboni auduboni, 41, 139, 143
 coronata hooveri, 142
 nigrescens, 139
 townsendi, 139, 164
 Dice, Lee R., habits of the magpie in southwestern Washington, 121
 Dickcissel, 164
 Dinosaurs, 90
Diomedea nigripes, 167
 Dipper, American, 41, 133, 169
 Dixon, Joseph, the home of the Baird sand piper, 77
 Dove, Mourning, 22, 32

- Western Mourning, 59, 135, 176
Dryobates pubescens homorus, 35
scalaris symplectus, 162
villosus monticola, 35, 136
villosus picoides, 17
villosus sitkensis, 17
Duck, Lesser Scaup, 59
Ruddy, 59
Scaup, 141
Dumetella carolinensis, 41
Dunlin, 83
- E**
- Eagle, Bald, 49, 135
Golden, 34, 91, 162
Editorial notes and news, 26, 72, 104, 144,
171, 188
Elanus leucurus, 170, 185
Empidonax difficilis difficilis, 60, 169
griseus, 137
minimus, 163
trailli trailli, 137
wrighti, 163
Ereunetes mauri, 32
Erismatura jamaicensis, 59
Esterly, C. O., how does the shrike carry its
prey? 25
Euphagus carolinus, 173
cyanocephalus, 36, 60, 137
- F**
- Falco mexicanus*, 135, 162
peregrinus anatum, 16
peregrinus pealei, 16
sparverius phalaena, 34, 135
sparverius sparverius, 59
Falcon, Peale, 16
Prairie, 135, 162
Finch, California Purple, 46, 52, 60, 99
Cassin Purple, 39, 138
Hepburn Rosy, 175
House, 138, 166
Flicker, 36
Red-shafted, 60, 98, 136, 158
Flycatcher, Ash-throated, 136, 158
Gray, 133, 137
Least, 163
Olive-sided, 9, 36, 46, 58, 60, 101, 170
Traill, 137
Vermilion, 25, 102
Western, 52, 60, 97, 169
Wright, 163
Forbush, Edward Howe, review of his re-
cent publications, 145
Fulica americana, 32, 59, 65, 85, 134
Fulmars, 9
- G**
- Gadwall, 156, 157, 158
Gallinago delicata, 32, 134
Gallinula galeata, 23
Gallinule, Florida, 22
Purple, 54
Gavia immer, 30
pacifica, 15
stellata, 15
Geococcyx californianus, 23, 160, 162
Geothlypis beldingi, 182
beldingi goldmani, 183
trichas occidentalis, 139
trichas sinuosa, 61
Gifford, H., a communication, 73
Glaucidium gnoma gnoma, 35
Gnatcatcher, Black-tailed, 156
Godwit, Marbled, 156
Golden-eye, 126
Goldfinch, Arkansas, 163
Green-backed, 60, 158
Lawrence, 60
Pale, 138
Western, 39
Willow, 60, 96
Goose, Canada, 134
Hutchins, 126
Tule, 105, 106
White-cheeked, 16
White-fronted, 105
Goshawk, Eastern, 70, 127, 185
Western, 70, 103, 127
Grebe, Eared, 57
Holboell, 15
Horned, 15, 30
Pied-billed, 24, 58, 138, 158
Western, 24, 56, 133
Grey, Henry, vermilion flycatcher at San
Diego, California, 102; zone-tailed
hawk at San Diego, California, 103
Grinnell, H. W., review of L. S. Crandall's
"pets, their history and care", 146
Grinnell, Joseph, the sub-species of *Hes-*
periphona vespertina, 17; a diagram
for illustrating the seasonal shifting
of the bird calendar, 68; an invasion
of California by the eastern goshawk,
70; review of "second annual report
of bird counts in the United States",
73; review of A. C. Shelton's "a dis-
tributional list of the land birds of
west central Oregon", 174
Grinnell, J., and Storer, T. I., a new race of
fox sparrow from the vicinity of
Mono lake, California, 165
Grosbeak, Alaska Pine, 175
Black-headed, 41, 52, 98
British Columbia Evening, 20
California Black-headed, 158
California Evening, 20
Eastern Evening, 19
Evening, 17
Mexican Evening, 20

- Pacific Black-headed, 61
 Rocky Mountain Evening, 21
 Rocky Mountain Pine, 39
 Rose-breasted, 171
 Western Blue, 73, 164
 Western Evening, 137
 Grouse, Canada Ruffed, 32, 33
 Columbian Sharp-tailed, 32, 135
 Oregon Ruffed, 12, 168
 Richardson, 32
 Sage, 32, 38
 Sooty, 9, 11, 135
 Guillemot, Pigeon, 58, 62, 71
 Guiraca caerulea lazula, 164
 Gull, California, 133, 177
 Ring-billed, 177
 Sabine, 16
 Western, 9, 58, 71, 133
- H**
- Haematopus bachmani, 71
 Haliaeetus leucocephalus, 135
 Hanford, Forrest S., the Townsend solitaire, 13
 Hanna, Wilson C., further notes on the white-throated swifts of Slover mountain, 3
 Hansen, Harold E., the Florida gallinule in San Francisco county, California, 22
 Hansen, Harold E., and Squires, Walter E., a list of the birds breeding in San Francisco county, California, 54
 Hawk, American Sparrow, 59
 Cooper, 33, 135, 148
 Desert Sparrow, 34, 133, 135
 Duck, 22
 Harris, 142
 Marsh, 32, 103, 186
 Red-bellied, 129
 Red-tailed, 148
 Rough-legged, 135
 Sharp-shinned, 16, 32, 135, 148
 Sparrow, 98
 Swainson, 34, 135
 Western red-tail, 59, 132
 Zone-tailed, 103
 Hedymeles ludovicianus, 171
 Helodromas solitarius cinnamomeus, 162
 Hen, Sage, 187
 Henderson, Junius, the Bohemian waxwing in Colorado, 141
 Henshaw, F. W., game bird conditions in Sutter county, California, 24
 Heron, Anthony Green, 57, 156
 Black-crowned Night, 57, 135, 142, 156, 159, 176
 Great Blue, 10, 32, 57, 134, 157
 Hesperiphona vespertina, 17
 vespertina brooksi, 19, 20
 vespertina californica, 19, 20
 vespertina mexicana, 22
 vespertina montana, 18, 20, 22, 137
 vespertina vespertina, 19, 20
 vespertina warreni, 21
 Heteractitis incanus, 16, 71
 Hirundo erythrogaster, 41, 61, 139
 Holland, Harold M., the valley quail occupying nests of the roadrunner, 23
 Howell, A. B., review of his "birds of the islands off the coast of southern California", 172; condition of game birds in east-central California, 186
 Hummingbird, Allen, 73
 Anna, 60, 160
 Broad-tailed, 36
 Calliope, 136, 142, 169
 Rufous, 9, 47, 52, 96, 98, 136, 163
 Hydrochelidon nigra surinamensis, 133
 Hylocichla fuscescens salicicola, 43
 guttata auduboni, 43, 165
 guttata guttata, 140
 guttata slevini, 186
 ustulata ustulata, 61, 142
- I**
- Ibis, Scarlet, 46
 White-faced Glossy, 156, 157
 Icteria virens longicauda, 41, 139, 164
 Icterus bullocki, 39, 137
 Ixobrychus exilis, 186
 Ixoreus naevius meruloides, 130
 naevius naevius, 140
- J**
- Jaeger, Parasitic, 81
 Pomarine, 81
 Jay, Black-headed, 33, 37, 137
 Blue-eared, 94
 Blue-fronted, 169
 California, 25, 60, 104
 Coast, 52, 137
 Crested, 9
 Long-crested, 163
 Pinyon, 137, 150, 152
 Texas, 163
 Woodhouse, 163
 Junco, Intermediate, 39
 Pink-sided, 39
 Point Pinos, 60
 Shufeldt, 133, 138
 Sierra, 60, 185
 Slate-colored, 138
 Thurber, 169
 Junco hyemalis connectens, 39
 hyemalis hyemalis, 138
 hyemalis mearnsi, 39
 hyemalis shufeldti, 138
 hyemalis thurberi, 169
 oreganus pinosus, 60
 oreganus thurberi, 60, 185

K

- Kennedy, C. H., some factors involved in the nesting habit of birds, 87
 Killdeer, 32, 59, 134, 143, 158
 Kingbird, Cassin, 158, 163
 Eastern, 136
 Western, 36, 58, 133, 136, 170
 Kingfisher, Belted, 9, 35, 91, 136, 148, 162
 Western Belted, 22, 60
 Kinglet, Ruby-crowned, 33, 42, 140
 Western Golden-crowned, 42, 47, 50
 Kitchin, E. A., the black-footed albatross off the coast of Washington, 167
 Kite, White-tailed, 170, 185

L

- Ladd, N. M., review of his "how to make friends with birds", 144
 Lanius ludovicianus excubitorides, 41, 139
 ludovicianus gambeli, 25, 61
 Lanivireo solitarius cassini, 41, 139, 164
 Lark, California Horned, 60, 156, 169
 Desert Horned, 36, 137, 163
 Dusky Horned, 133
 Larus californicus, 133, 177
 delawarensis, 177
 occidentalis, 58, 71, 133
 Law, J. E., notes on the Arizona spotted owl, 69
 Linaria cyanea, 171
 Linnnet, California, 60
 Lobipes lobatus, 32
 Longspur, 79
 Loon, Common, 30
 Pacific, 15
 Red-throated, 15
 Lophodytes cucullatus, 68, 143
 Lophortyx californica californica, 59, 135
 californica vallicola, 23, 173, 187
 Loxia curvirostra minor, 138
 curvirostra sitkensis, 17
 Lunda cirrhata, 58, 71

M

- Magpie, 37, 137, 143
 Black-billed, 121
 Mailliard, E. C., a portable nest, 166
 Mailliard, Joseph, the hooded merganser in Stanislaus county, California, 68; concerning two forms of the Bryant marsh sparrow in California, 69; review of A. B. Howell's "birds of the islands off the coast of southern California", 172
 Mallard, 24, 30, 59, 121, 125, 133, 141, 143, 157, 158
 Mareca americana, 30, 85, 142
 penelope, 142
 Marila affinis, 59

- americana, 134
 marila, 141
 valisineria, 87
 Meadowlark, Western, 39, 60, 126, 137, 155
 Melanerpes formicivorus bairdi, 69, 103
 Melospiza lincolni gracilis, 130
 lincolni lincolni, 40, 130, 138
 melodia caurina, 16
 melodia merrilli, 138
 melodia montana, 40
 melodia pusillula, 61
 melodia rufina, 16
 melodia santaecrucis, 61
 Merganser, 133
 Hooded, 68, 143
 Red-breasted, 16, 30
 Mergus americanus, 133
 serrator, 16, 30
 Mimus polyglottos leucopterus, 164
 Mitchell, H. H., peculiar nesting habits of the avocet, 101
 Mockingbird, Western, 158, 164
 Molothrus ater ater, 37, 137
 Murre, California, 58, 71, 172
 Murrelet, Xantus, 173
 Myadestes townsendi, 14
 Myiarchus cinerascens cinerascens, 136
 Myiochanes richardsoni richardsoni, 36, 136, 169

N

- Nannus hiemalis pacificus, 140
 Nettion carolinense, 30
 Nighthawk, Pacific, 73, 169
 Texas, 159
 Western, 36
 Nokes, I. D., western grebe breeding in southern California, 24; vermilion fly-catcher near Los Angeles, 25
 Nucifraga columbiana, 37, 137, 149, 163
 Nutcracker, Clarke, 37, 133, 137, 149, 163
 Nuthatch, Pigmy, 103, 133, 140
 Red-breasted, 103, 140
 Rocky Mountain, 103, 140, 164
 Slender-billed, 140
 Nuttallornis borealis, 36, 60, 170
 Nyctea nyctea, 24, 127
 Nycticorax nycticorax naevius, 134, 142

O

- Oberholser, H. C., the number of species and subspecies of birds in Texas, 68; the status of *Aphelocoma cyanotis* and its allies, 94; a new subspecies of *Geothlypis beldingi*, 182
 Oceanodroma furcata, 141
 homochroa, 58
 kaedingi, 58, 71, 185
 Oidemia deglandi, 16
 perspicillata, 16

- Olor buccinator*, 32
Oporornis tolmiei, 41, 139
Oreortyx picta picta, 134
 picta plumifera, 169, 186
Oreoscoptes montanus, 41, 140, 143
Oreospiza chlorura, 41, 130
 Oriole, Bullock, 39, 56, 133, 137, 176
 Osprey, American, 34, 117, 135
Otocoris alpestris actia, 60, 169
 alpestris leucolaema, 36, 163
 alpestris merrilli, 137
Otus asio kennicotti, 16, 143
 asio macfarlanei, 136
 Ouzel, Water, 8, 13, 14
 Owl, American Barn, 59, 155
 Arctic Horned, 35, 70
 Arizona Spotted, 69
 Burrowing, 60, 133, 136, 158, 162
 Coast Screech, 57
 Dusky Horned, 57, 125
 Great Grey, 175
 Great Horned, 152
 Kennicott Screech, 16, 126, 143
 Long-eared, 34, 123, 135, 142
 Macfarlane Screech, 136
 Pigmy, 35
 Saw-whet, 35
 Screech, 50, 96
 Short-eared, 35, 126, 136
 Snowy, 24, 71, 127
 Western Burrowing, 48
 Western Horned, 35, 136
Oxyechus vociferus, 32, 134
 vociferus vociferus, 59, 143
 Oystercatcher, Black, 71
- P
- Palmer, T. S., names of writers on California birds, 66; Botta's visit to California, 159; an early experiment in keeping hummingbirds in captivity, 168; the oldest American ornithologist, 166
Pandion haliaëtus carolinensis, 34, 117, 135
Parabuteo unicinctus harrisi, 142
Passer domesticus, 39, 60, 69
Passerculus sandwichensis alaudinus, 16, 39, 138
 sandwichensis bryanti, 60, 69
 sandwichensis sandwichensis, 16
 sandwichensis savanna, 68
Passerella iliaca, 138
 iliaca megarhyncha, 165
 iliaca meruloides, 130
 iliaca monoensis, 165
 iliaca schistacea, 138, 165
 iliaca stephensi, 165
Passerina amoena, 41, 61, 139
Pedioecetes phasianellus columbianus, 32, 135
Pelecanus californicus, 102
 erythrorhynchos, 30, 133, 178
 Pelican, California Brown, 56, 102
 White, 30, 44, 133, 178
Pelidna alpina sakhalina, 134
 Pemberton, J. R., notes on the western grasshopper sparrow, 24
Penthestes atricapillus septentrionalis, 41, 140
 carolinensis agilis, 164
 gambeli gambeli, 41, 140, 164
 rufescens barlowi, 61
 Petrel, Ashy, 58
 Fork-tailed, 141
 Kaeding, 58, 71, 185
Petrochelidon lunifrons lunifrons, 41, 61, 139
 Pewee, Western Wood, 36, 52, 133, 136, 169
 Peyton, S. B., large sets of eggs of California woodpecker, 103; western goshawk in Ventura county, California, 103; early nesting of the California brown pelican on Anacapa island, California, 112
Phalacrocorax auritus albociliatus, 58, 186
 pelagicus resplendens, 59, 71
 penicillatus, 59, 186
Phalaenoptilus nuttalli californicus, 129
 nuttalli nuttalli, 36, 136, 163
 Phalarope, Northern, 32
 Wilson, 134, 167
Phasianus torquatus, 59, 135, 187
 Pheasant, Ring-necked, 59, 126, 135, 187
 Phoebe, Black, 60, 158, 169
 Say, 132, 133, 136, 156
Pica pica hudsonia, 37, 121, 137
Picus nataliae, 63
 Pigeon, Band-tailed, 98, 162
Pinicola enucleator montana, 39
 Pintail, 16
Pipilo crissalis crissalis, 170
 maculatus falcifer, 61
 maculatus megalonyx, 169
 maculatus montanus, 139, 164
 Pipit, American, 139
Piranga hepatica hepatica, 164
 ludoviciana, 41, 139
 rubra cooperi, 164
Pisobia bairdi, 25, 77, 142
Planesticus migratorius propinquus, 43, 61, 140, 185, 186
 Plover, Black-bellied, 16
 Semipalmated, 25
Podilymbus podiceps, 58, 133
Poocetes gramineus affinis, 130
 gramineus confinis, 39, 138
 Poor-will, 36, 136, 163
 Dusky, 129
Porzana carolina, 32, 134, 168
Psaltriparus melanotis lloydi, 165
 minimus minimus, 61
 plumbeus, 165

Ptychoramphus aleuticus, 58
Puffin, Tufted, 58, 71
Puffinus opisthomelas, 173
Pyrocephalus rubinus mexicanus, 25, 102

Q

Quail, California, 135
 California Valley, 23, 59, 159, 187
 Mearns, 162
 Mountain, 134
 Plumed, 169, 187
Querquedula cyanoptera, 134
 discors, 32

R

Rail, Sora, 32, 134, 168
 Virginia, 59
Rallus virginianus, 59
 Raven, 132, 137
 Northern, 17
 Western, 57, 155, 158
 White-necked, 163
 Ray, M. S., some further notes on San Francisco county birds, 170
Recurvirostra americana, 32, 101, 134
 Redhead, 134
 Redpoll, 129
 Red-tail, Alaska, 16
 Western, 34, 162
 Red-wing, San Diego, 133, 137
 Thick-billed, 39
 Tri-colored, 176
Regulus calendula calendula, 42, 140
satrapa olivaceus, 42
 Richards, W. W., wild ducks in a city park, 85
Riparia riparia, 41, 61, 139
 Roadrunner, 23, 143, 155, 160, 162
 Robin, Eastern, 62
 Western, 43, 46, 61, 97, 99, 140, 176, 185, 186
 Roc, 171
 Rust, H. J., an annotated list of the birds of Fremont county, Idaho, as observed during the summer of 1916, 29

S

Sage-hen, 133, 135
Salpinctes obsoletus obsoletus, 41, 61, 140
 Sandpiper, Aleutian, 16
 Baird, 25, 77, 141
 Bartramian, 162
 Buff-breasted, 187
 Pectoral, 79
 Red-backed, 134
 Semipalmated, 79
 Spotted, 16, 32, 134
 Western, 32
 Western Solitary, 162
 Sapsucker, Red-breasted, 104
 Williamson, 62, 136

Sayornis nigricans, 60, 169
 sayus, 136
 Schaefer, O. F., occurrence of the red-breasted nuthatch in Arizona, 103
 Schussler, G. W., the surf bird at San Francisco, 101; nesting of the California brown towhee in San Francisco, 170
 Scoter, Surf, 16
 White-winged, 16
 Scudder, B. A., review of his "conservation of our wild birds", 74
Selasphorus alleni, 60
platycercus, 36
rufus, 136, 163, 168
 Sell, R. A., some notes on the effect on bird life of the Corpus Christi storm of August 18, 1916, 43
 Shearwater, Dark-bodied, 57
 Shelton, A. C., review of his "a distributional list of the birds of west central Oregon", 174
 Shepardson, D. I., notes from the southern Sierras, 168
 Shrike, California, 25, 61, 143
 White-rumped, 41, 133, 139
Sialia currucoides, 43, 140
mexicana anabelae, 169
mexicana occidentalis, 140
 Siskin, Pine, 39, 49, 60, 61, 130, 138
Sitta canadensis, 103, 140
carolinensis aculeata, 140
carolinensis nelsoni, 140, 164
pygmaea, 140
 Skinner, M. P., the ospreys of the Yellowstone, 117; the birds of Molly Island, Yellowstone National Park, 177
 Smith, A. P., some birds of the Davis mountains, Texas, 161
 Smith, F. J., the snowy owl in Humboldt county, California, 24
 Snipe, Wilson, 32, 134
 Solitaire, Townsend, 13, 14
 Sparrow, Aleutian Savannah, 16
 Bell, 143, 156, 186
 Brewer, 37, 39, 133, 138, 139
 Bryant Marsh, 60, 69
 Clay-colored, 163
 English, 39, 60, 62, 69, 145
 Fox, 138
 Gambel, 138
 Golden-crowned, 16, 130, 138
 Intermediate, 130
 Lincoln, 40, 130, 138
 Merrill Song, 138
 Mono Fox, 165
 Mountain Song, 34, 40
 Nevada Sage, 142
 Nuttall, 9, 46, 60, 101, 170
 Oregon Vesper, 130
 Rufous-crowned, 130

- Rusty Song, 99
 Sage, 37, 38, 39, 133, 138
 Salt Marsh Song, 61
 San Diego Song, 102
 Santa Cruz Song, 61
 Savannah, 68
 Scott, 163
 Slate-colored, 133, 138
 Western Chipping, 9, 39, 138
 Western Grasshopper, 24
 Western Lark, 133, 138
 Western Savannah, 39, 69, 138
 Western Vesper, 39, 40, 138
 White-crowned, 9, 25, 37, 39
 Yakutat Fox, 130
 Yakutat Song, 16
- Speotyto cunicularia hypogaea*, 60, 136, 162
Sphyrapicus thyroideus, 62, 136
 thyroideus nataliae, 63, 65
 thyroideus thyroideus, 63, 64
Spinus pinus pinus, 39, 60, 130, 138
Spiza americana, 164
Spizella breweri, 39, 138
 pallida, 163
 passerina arizonae, 39, 138
 Sprig, 85
Squatarola squatarola, 16
 Squires, W. A., and Hansen, H. E., a list of the birds breeding in San Francisco county, California, 54
 Squires, W. A., is the California woodpecker a tippler?, 69; some field notes for 1917, 185
Steganopus tricolor, 134, 167
Stellula calliope, 136, 142, 169
Sterna caspia, 182, 187
 Stilt, Black-necked, 157
 Storer, T. I., review of B. A. Scudder's "conservation of our wild birds", 74; Bohemian waxwing in Mariposa county, 103; review of N. M. Ladd's "how to make friends with birds", 144; review of recent publications of E. H. Forbush, 145
 Storer, T. I., and Grinnell, J., a new race of fox sparrow from the vicinity of Mono Lake, California, 165
Streptoceryle alcyon alcyon, 162
Strix occidentalis lucida, 69
 occidentalis occidentalis, 69
Sturnella neglecta, 39, 60, 137
 Surf-bird, 101
 Swallow, Bank, 41, 61, 91, 139
 Barn, 10, 41, 49, 61, 62, 139
 Cliff, 39, 41, 61, 62, 104, 139, 158
 Northern Violet-green, 41, 139
 Tree, 53, 98, 143
 Swan, Trumpeter, 32, 176
 Swarth, H. S., geographical variation in *Sphyrapicus thyroideus*, 62; observations on some Fresno county birds, 129; review of A. T. Wayne's "a list of avian species for which the type locality is South Carolina", 146
 Swift, Vaux, 96, 136
 White-throated, 3, 26, 163, 169
- T
- Tachycineta thalassina lepida*, 41, 139
 Tanager, Cooper, 164
 Hepatic, 164
 Scarlet, 52
 Western, 41, 52, 139
 Tattler, Wandering, 16, 71
 Teal, Blue-winged, 32
 Cinnamon, 134, 157, 158, 167
 Green-winged, 30, 125
Telmatodytes palustris paludicola, 61
 palustris plesius, 130, 140
 Tern, Black, 133
 Caspian, 182, 187
 Thrasher, California, 159
 Curve-billed, 164
 Leconte, 143
 Palmer, 104
 Sage, 35, 41, 133, 140, 143
 Thrush, Alaska Hermit, 130, 140
 Audubon Hermit, 43, 165
 Hermit, 46
 Monterey Hermit, 186
 Northern Varied, 130
 Russet-backed, 46, 48, 61, 96, 98, 99, 142
 Varied, 9, 46, 100, 140
 Willow, 43
Thryomanes bewicki eremophilus, 164
 bewicki spilurus, 61
 Titmouse, Black-crested, 164
 Gray, 103
 Plain, 61
Totanus melanoleucus, 16, 134
 Towhee, California Brown, 58, 170
 Green-tailed, 36, 41, 130
 Mountain, 164
 San Francisco, 61
 Spurred, 139, 169
Toxostoma curvirostre curvirostre, 164
 lecontei, 143
Trochilus colubris, 168
Troglodytes aedon parkmani, 41, 61, 130, 140
Tryngites subruficollis, 187
 Turkey, Australian Brush, 88
 Turnstone, Black, 16
 Tyler, J. G., nesting of the Wilson phalarope near Fresno, California, 167
Tyrannus tyrannus, 136
 verticalis, 36, 136, 170
 vociferus, 163
- U
- Uria troille californica*, 58, 71

V

- Veery, 48
 Vermivora celata celata, 130
 celata lutescens, 61, 130, 139
 rubricapilla gutturalis, 139
 Vireo, Cassin, 41, 133, 139, 164
 Hutton, 61
 Stephens, 164
 Western Warbling, 41, 61, 139, 169
 Vireo huttoni huttoni, 61
 huttoni stephensi, 164
 Vireosylva gilva swainsoni, 41, 61, 139, 169
 Vulture, Turkey, 32, 57, 135

W

- Walker, Alex., some birds of central Oregon, 131
 Warbler, Audubon, 41, 49, 133, 139, 143
 Black-throated Gray, 139
 Calaveras, 139
 California Yellow, 61, 139, 169
 Golden Pileolated, 11, 50, 61, 98, 170
 Lutescent, 61, 98, 130, 133, 139
 Macgillivray, 139
 Myrtle, 142
 Orange-crowned, 130
 Pileolated, 139
 Sonora Yellow, 164
 Tolmie, 41
 Townsend, 139, 164
 Yellow, 41
 Warburton, S., another instance of lead poisoning in ducks, 141; another record of the European widgeon from the state of Washington, 142; cases of early nesting in the state of Washington, 143
 Waxwing, Bohemian, 103, 128, 141
 Cedar, 41, 96, 103, 141
 Wayne, A. T., review of his "a list of avian species for which the type locality is South Carolina", 146
 Wear, Winifred N., notes from the Fresno district, 142
 Wetmore, Alexander, an abnormal egg of *Fulica americana*, 65
 Widgeon, European, 142
 Wiley, Leo, nesting of Harris hawk in southeastern California, 142
 Willet, Western, 134, 156
 Willett, G., further notes on the birds of Forrester island, Alaska, 15; another Alaska record for the mourning dove, 22; some April nesting notes from the vicinity of Buena Vista Lake, Kern County, California, 143
 Wilschnia pusilla chryseola, 61, 170
 pusilla pileolata, 139
 Wood, C. A., review of his "the fundus oculi of birds especially as viewed by the ophthalmoscope", 174
 Woodpecker, Alpine Three-toed, 175
 Batchelder, 35
 California, 69, 103
 Downy, 52
 Gairdner, 52
 Lewis, 136
 Pileated, 9, 46, 97
 Queen Charlotte, 17
 Rocky Mountain Hairy, 33, 35, 133, 136
 Southern White-headed, 169
 Texas, 162
 White-headed, 63, 133, 136
 Wren, Baird, 156
 Cactus, 155
 Desert, 164
 Dotted Canyon, 130, 140
 Rock, 41, 61, 130, 133, 140, 156
 Seattle, 97, 98
 Tule, 61
 Vigors, 61
 Western House, 41, 61, 130, 140
 Western Marsh, 130, 140
 Western Winter, 49, 51, 73, 100, 140
 Wren-tit, Coast, 49
 Intermediate, 56
 Wyman, L. E., fork-tailed petrel and Baird sandpiper in southern California, 141; that goshawk invasion again, 185
 Wythe, Margaret W., Sierra junco breeding at Berkeley, 185

X

- Xanthocephalus xanthocephalus, 37, 137
 Xema sabini, 16
 Xenopicus albolarvatus albolarvatus, 63
 albolarvatus gravirostris, 63, 169

Y

- Yellow-legs, Greater, 16, 134, 173
 Yellowthroat, Salt-marsh, 61
 Western, 133, 139

Z

- Zamelodia melanocephala, 41
 melanocephala capitalis, 61
 Zenaidura macroura, 22
 macroura carolinensis, 32
 macroura marginella, 59, 135
 Zonotrichia coronata, 16, 130, 138
 leucophrys gambeli, 138
 leucophrys leucophrys, 39
 leucophrys nuttalli, 60, 170