LIST OF SKELETONS & CRANIA

IN THE SECTION OF

COMPARATIVE ANATOMY.

ARMY MEDICAL MUSEUM.

1876.

Army Medical Museum.

SURGEON GEN'LS OFFICE
MAY 23 1876
Army Medical Museum

LIST OF SKELETONS AND CRANIA

IN THE

SECTION OF COMPARATIVE ANATOMY

OF THE

UNITED STATES ARMY MEDICAL MUSEUM,

FOR USE DURING THE

INTERNATIONAL EXHIBITION OF 1876

IN CONNECTION WITH THE

REPRESENTATION OF THE MEDICAL DEPARTMENT U. S. ARMY.

SURGEON GENL'S OFFICE
MAY 1876
Army Medical Museum

ARMY MEDICAL MUSEUM, WASHINGTON, D. C.
1876.

PHILADELPHIA:
COLLINS, PRINTER.
705 Jayne Street.

ADVERTISEMENT.

THIS list of the skeletons and crania in the Section of Comparative Anatomy of the United States Army Medical Museum was prepared by Dr. H. C. YARROW, and is intended for distribution, during the Centennial Exhibition, among naturalists and others interested in comparative anatomy, for the purpose of showing the deficiencies of our collection, and soliciting contributions.

This collection constitutes one section of the Army Medical Museum, which, at present, is divided into six sections, as follows:—

In charge of Assistant Surgeon G. A. OTIS, U. S. A., Curator,

Surgical section	6539 specimens.
Anatomical section	1254 "
Miscellaneous section	240 "

In charge of Assistant Surgeon J. J. WOODWARD, U. S. A.:—

Medical section	1279 specimens.
Microscopical section	7275 "
Comparative Anatomy section . .	1522 "

The Army Medical Museum was created primarily for the purpose of preserving specimens illustrative of the wounds and diseases which produce death and disability during war, with the view of thereby facilitating the study of methods for diminishing mortality and alleviating suffering among soldiers. It is now the desire of the Surgeon General that, so far as the means placed at his disposal will permit, the collection shall be extended so as to embrace all forms of injuries and disease, so that it shall eventually become a general Pathological Museum, accessible for study to all medical men who are prosecuting original inquiries. Of the great usefulness of such a collection, it is unnecessary here to speak, or to point out how vain all hopes have proved that any large collection of this kind can be created except with the aid

and support of government. A cabinet of comparative anatomy furnishes the means for useful collateral studies, subordinate to the general purposes of a Pathological Museum: hence, such cabinets are found in connection with most of the great Pathological Collections of Europe, and one has been commenced at the Army Medical Museum.

The appropriations for the support of the Museum have been hitherto too limited to permit the expenditure of any considerable sum on the collection of comparative anatomy. The specimens enumerated in the following list were for the most part collected by medical and other officers of the army on duty at frontier posts. For the present, any increase of the collection can only be expected from such donations, which will thankfully be received from army officers or others, or from exchanges of duplicate specimens, which, however, as yet are only possible to a very limited extent.

Specimens presented need not be thoroughly cleaned and mounted. This laborious work is done in the Museum by Dr. F. SCHAFHIRT, by whom the greater part of the specimens enumerated in the following list were prepared. It will be sufficient, in the case of large skeletons or crania, if the flesh is roughly dissected from bone and the viscera, brain, &c., removed. The preparation thus prepared can be packed in a mixture of sawdust and salt, or simply dried, for transportation. Small animals are best preserved in alcohol, in which case an incision should be made along the middle line of the abdomen to give the alcohol access to the viscera.

J. J. WOODWARD,
Assistant Surgeon U. S. A.
In charge of the Medical, Microscopical, and Comparative Anatomy Sections, Army Medical Museum.
and of
The Representation of the Medical Department U. S. Army, at the International Exhibition.

LIST OF CRANIA AND SKELETONS OF NORTH AMERICAN MAMMALS.

Note.—In the preparation of this list the classification adopted is substantially the same as that of Dr. Theo. Gill in his paper entitled "*Arrangement of the Families of Mammals,*" Smithsonian Miscellaneous Collections, No. 230, 1872, and the nomenclature of the species is in accordance, for the most part, with the more recent views of prominent American Mammalogists.

CLASS **MAMMALIA.**

SUB-CLASS **Placentalia.**

SUPER-ORDER **EDUCABILIA.**

ORDER **Feræ.**

SUB-ORDER **FISSIPEDIA.**

Family FELIDÆ: *Cats, etc.*

Sub-Family *Felinæ:* Typical Cats.

Cran. 952, 1059, 1160, 1383. **Skel.** Lynx rufus (Guldenstädt), Raf. *Wild Cat.*

Cran. 10, 80. **Skel.** 793. Lynx rufus maculatus, Cs. and Yar. *Texas Wild Cat.*

Cran. 1396. **Skel.** Lynx rufus fasciatus, Cs. and Yar. *Red Cat.*

Cran. 180. **Skel.** Lynx canadensis (Geoff and Desm.), Raf. *Canada Lynx.*

Cran. 178, 179, 828, 954. **Skel.** 631. Felis concolor, Linn. *Panther; Painter; Puma; Cougar; American or California Lion.*

Cran. 1412. **Skel.** Felis onça, Linn. *Jaguar; Mexican Tiger.*

Family CANIDÆ: *Dogs, etc.*

Sub-Family *Caninæ:* Wolves.

Cran. 184, 185, 713, 714, 1417, 1418.	**Skel.** 712.	Canis lupus occidentalis, Cs. and Yar. *American Wolf; Timber or Buffalo Wolf; Lobo of the Mexicans.*
Cran. 186, 710, 711, 715.	**Skel.** 907, 1084.	Canis latrans, Say. *Coyote; Prairie Wolf.*

Sub-Family *Vulpinæ:* Foxes.

Cran. 189, 190, 191, 192.	**Skel.** 99.	Vulpes vulgaris pennsylvanicus, Cs. *Red Fox.*
Cran. 1161.	**Skel.** 1196.	Vulpes macrourus, Baird. *Prairie Fox.*
Cran. 955.	**Skel.** 1314.	Vulpes velox, And. and Bach. *Kit Fox; Swift Fox.*
Cran. 1546.	**Skel.**	Vulpes littoralis, Baird. *Island Fox.*
Cran. 193, 194, 195, 196.	**Skel.**	Urocyon cinereo-argentatus (Schreber), Cs. *Gray Fox.*

Family MUSTELIDÆ: *Weasels, etc.*

Sub-Family *Mustelinæ:* Martins.

Cran. 198.	**Skel.**	Mustela pennanti, Erxl. *Fisher; Black Cat.*
Cran. 197, 957.	**Skel.**	Mustela americana, Turton. *Pine Martin; American Sable.*
Cran.	**Skel.** 852, 1424.	Putorius longicauda, Rich. *Long-tailed Ermine.*
Cran. 1058.	**Skel.** 722, 1075.	Putorius erminea, (Linn.), Cuv. *White Weasel; Ermine.*

Cran. 199, 595, 1315, 1316.	**Skel.**	Putorius vison, Rich. *Brown Mink.*
Cran. 200.	**Skel.**	Gulo luscus, Sabine. *Wolverine.*

Sub-Family *Melinæ:* Badgers.

Cran. 203, 612, 834, 950, 1419.	**Skel.** 795.	Taxidea americana (Bodd), Baird. *Missouri Badger.*

Sub-Family *Mephitinæ:* Skunks.

Cran. 825, 202, 704, 956, 1193.	**Skel.** 161.	Mephitis mephitica (Shaw), Baird. *American Skunk.*

Sub-Family *Lutrinæ:* Otters.

Cran. 201, 951.	**Skel.**	Lutra canadensis (Turton), Cuv. *American Otter.*

Family URSIDÆ: *Bears.*

Cran. 205, 672, 1006, 1043.	**Skel.** 1042.	Ursus arctos horribilis (Ord.), Cs. and Yar. *Grizzly Bear.*
Cran. 206, 207, 208, 209, 210.	**Skel.** 1210.	Ursus americanus, Pallas. *Black Bear.*
Cran. 211.	**Skel.**	Thalarctos maritimus (Linn.), Gray. *White or Polar Bear.*

Family PROCYONIDÆ: *Raccoons, etc.*

Sub-Family *Procyoninæ:* Typical Raccoons.

Cran. 204, 613, 1060.	**Skel.** 134.	Procyon lotor (Linn.), Starr. *Common Raccoon.*

Sub-Order **PINNIPEDIA.**

Family Otariidæ: *Eared Seals.*

Cran.	**Skel.** 1057.	Callirhinus ursinus (Schreber), Gray. *Fur Seal.*
Cran. 1048.	**Skel.**	Eumetopias stelleri (Fischer), Gray. *Sea Lion.*
Cran. 261.	**Skel.**	Zalophus gilliespii (MacBain), Gill. *Sea Dog.*

Family Phocidæ: Hair Seals.

Sub-Family *Phocinæ.*

Cran. 259.	**Skel.**	Phoca vitulina, Linn. *Common Seal; Harbor Seal.*
Cran. 258.	**Skel.**	Erignathus barbatus (O. Fabr.), Gill. *Square-Flipper Seal.*

Sub-Family *Cystophorinæ:* Crested Seals.

Cran. 266.	**Skel.**	Cystophora cristata (Erxl.), Nilsson. *Hooded Seal.*

Family Rosmaridæ: *Walruses.*

Cran. 888.	**Skel.** 1053.	Rosmarus obesus (Illiger), Gill. *Atlantic Walrus.*

Order **Ungulata.**

Sub-Order **ARTIODACTYLI.**

Family Bovidæ: *Bovines.*

Sub-Family *Bovinæ:* Typical Bovines.

Cran. 832, 959.	**Skel.** 686.	Bos americanus (Gmelin), *American Buffalo.*

Sub-Family *Ovinæ:* Sheep.

Cran. 671, 1049, 1422.	**Skel.** 1051.	Ovis montana, Cuvier. *Rocky Mountain Sheep; Bighorn.*

Family Antilocapridæ: *American Antelopes.*

Cran. 252, 253, 632, 633, 680.	**Skel.**	Antilocapra americana (Ord.). *Antelope; Prong-horn Antelope; Cabree.*

Family CERVIDÆ: *Deer.*

Sub-Family *Cervinæ:* Typical Deer.

Cran. 247, 1022, 1077, 1525, 1537.	**Skel.** 1069.	Cervus canadensis, Erxl. *American Elk; Wapiti.*
Cran. 248, 1394.	**Skel.** 1545.	Cariacus macrotis (Say), Gray. *Mule, or Black tailed Deer.*
Cran. 249, 250, 251, 622, 635.	**Skel.** 634.	Cariacus virginianus (Bodd), Gray. *Virginia Deer; Red Deer.*
Cran. 833, 1395.	**Skel.** 1544.	Cariacus virginanus macrourus (Raf.), Cs. *White-tailed Deer.*

Family DYCOTYLIDÆ: *Peccaries.*

Cran. 244.	**Skel.** 829.	Dicotyles torquatus, Cuvier. *Peccary.*

ORDER **Cete.**

SUB-ORDER **DENTICETE.**

Family DELPHINIDÆ: *Dolphins, etc.*

Sub-Family *Delphininæ:* Typical Dolphin.

Cran. 262.	**Skel.** 1308.	Delphinus delphis, Linn.

SUPER-ORDER **INEDUCABILIA.**

ORDER **Chiroptera.**

SUB-ORDER **ANIMALIVORA.**

Family NOCTILIONIDÆ: *Free-tailed Bats.*

Cran.	**Skel.** 601.	Nyctinomus nasutus (Spix.), Tomes. *Snouty Bat.*

Family VESPERTILIONIDÆ: *Ordinary Bats.*

Cran. 986.	**Skel.**	Corynorhinus macrotis (Le Conte), Allen. *Big-eared Bat.*
Cran. 981.	**Skel.** 848.	Antrozous pallidus (Le Conte), Allen. *Pale Bat.*
Cran. 1192	**Skel.** 1009.	Atalapha (*Nycticejus.*) crepuscularis (Le Conte), Cs. *Twilight Bat.*

Cran. 1353.	**Skel.** 1198.	Atalapha (*Lasiurus*) noveboracensis (Erxl.), Cs. *Red Bat; New York Bat.*
Cran. 992, 996, 997, 1208.	**Skel.**	Vespertilio subulatus, Say. *Little Brown Bat.*
Cran. 1008.	**Skel.** 174, 854.	Vespertilio (*Vesperus*) fuscus, Beauv. *Carolina Brown Bat.*
Cran. 1134.	**Skel.** 849.	Vespertilio (*Vesperugo*) georgianus, F. Cuv. *Georgia Bat.*

ORDER **Insectivora.**

SUB-ORDER **INSECTIVORA VERA.**

Family TALPIDÆ: *Moles.*

Sub-Family *Talpinæ:* Typical Moles.

Cran.	**Skel.** 112.	Scalops aquaticus (Linn.), Cuvier. *Common Mole.*
Cran.	**Skel.** 1106.	Condylura cristata (Linn.), Illiger. *Star-nosed Mole.*

Family SORICIDÆ: *Shrews.*

Cran. 232.	**Skel.**	Sorex personatus, Geoff. *Masked Shrew.*

ORDER **Glires.**

SUB-ORDER **SIMPLICIDENTATA.**

Family ZAPODIDÆ: *Jumping Mice.*

Cran. 1326.	**Skel.**	Zapus hudsonius (Zimm.), Cs. *Jumping Mouse.*

Family MURIDÆ: *Mice.*

Sub-Family *Murinæ:* Typical Mice.

Cran. 130, 222, 223, 552.	**Skel.** 19.	Mus decumanus, Pallas. *Common Rat.*
Cran. 984, 985.	**Skel.**	Mus tectorum, Savi. *White bellied Rat.*
Cran. 225, 226, 227.	**Skel.** 69.	Mus musculus, Linn. *Common House Mouse.*
Cran. 224, 983.	**Skel.**	Neotoma floridana (Say), Ord. *Wood Rat.*

Cran.	**Skel.** 1356.	Neotoma cinerea (Ord.), Baird. *Rocky Mountain Rat.*
Cran. 967, 968, 969, 970.	**Skel.**	Sigmodon hispidus (Say), Ord. *Cotton Rat.*
Cran. 597, 1328.	**Skel.** 1406.	Hesperomys (*Vesperimus*) leucopus (Raf.). *White-footed Mouse.*
		Sub-Family *Arvicolinæ:* Field Mice.
Cran. 608, 1040, 1404.	**Skel.**	Arvicola (*Myonomes*) riparius, Ord. *Field Mouse.*
Cran. 228, 229, 230, 1194.	**Skel.**	Fiber zibethicus (Linn.), Cuvier. *Musk Rat.*
		Family SACCOMYIDÆ: *Pouched Mice.*
		Sub-Family *Dipodomyinæ*
Cran.	**Skel.** 681, 1137.	Dipodomys phillipsi ordi (Woodh.), Cs. *Kangaroo Rat.*
Cran. 990.	**Skel.**	Cricetodipus flavus, Baird. *Western Mouse.*
		Family GEOMYIDÆ: *Gophers.*
Cran. 719, 827.	**Skel.**	Geomys bursarius, Shaw. *Pouched Gopher.*
Cran.	**Skel.** 1310.	Thomomys talpoides (Rich.), Baird. *Fort Union Gopher.*
Cran. 1001, 1002.	**Skel.**	Thomomys talpoides umbrinus (Rich.), Cs. *Black-faced Gopher.*
		Family CASTORIDÆ: *Beavers.*
Cran. 220, 221, 794, 822.	**Skel.** 1081, 1082.	Castor canadensis, Kuhl. *American Beaver.*
		Family SCIURIDÆ: *Squirrels, etc.*
		Sub-Family *Sciurinæ:* Typical Squirrels.
Cran. 975.	**Skel.** 1357.	Sciurus aberti, Woodh. *Tuft-eared Squirrel.*

Cran. 216.	**Skel.** 1355.	Sciurus hudsonius, Pallas. *Red Squirrel.*
Cran. 623, 624.	**Skel.**	Sciurus vulpinus, Gmelin. *Southern Fox Squirrel.*
Cran. 214, 215.	**Skel.**	Sciurus cinereus, Linn. *Fox or Cat Squirrel of Middle States.*
Cran.	**Skel.** 10	Sciurus carolinensis, Gmelin. *Gray Squirrel.*
Cran.	**Skel.** 175.	Pteromys volucella, Cuv. *Flying Squirrel.*
Cran. 896.	**Skel.**	Pteromys volucella oregonensis (Bach). *Oregon Flying Squirrel.*
Cran. 596.	**Skel.** 561.	Tamias striatus (Linn.). *Chipmunk.*
Cran. 1361.	**Skel.** 1362.	Tamias quadrivittatus (Say), Rich. *Four-striped Squirrel.*
Cran.	**Skel.** 1363.	Tamias lateralis (Say), Allen. *Rocky Mountain Chipmunk.*
Cran. 974, 1398.	**Skel.**	Spermophilus grammurus (Say), Bach. *Line-tail Squirrel.*
Cran. 1312, 1313.	**Skel.** 1311.	Spermophilus tridecem-lineatus (Mitch.), Aud. and Bach. *Striped Prairie Squirrel.*
Cran. 1433.	**Skel.**	Spermophilus richardsoni (Sabine), Bd. *Richardson's Gopher.*
Cran. 217, 218, 835, 903, 904.	**Skel.** 905, 1409, 1410.	Cynomys ludovicianus (Ord.), Bd. *Prairie Dog.*
Cran.	**Skel.** 1352.	Cynomys columbianus (Ord.), Allen. *Short-tailed Prairie Dog.*
		Sub-Family *Arctomyinæ:* Woodchucks.
Cran. 219.	**Skel.** 1205.	Arctomys monax, Linn. *Woodchuck.*
Cran. 1358.	**Skel.**	Arctomys flaviventer, Aud. and Bach. *Yellow-bellied Marmot.*
		Family HYSTRICIDÆ: *Porcupines.*
Cran. 978.	**Skel.**	Erethizon dorsatus, Cuvier. *Porcupine.*

Cran. 231.	**Skel.**	Erethizon epixanthus, Brandt. *Yellow-haired Porcupine.*

SUB-ORDER **DUPLICIDENTATA.**

Family LEPORIDÆ: *Hares.*

Cran. 239.	**Skel.**	Lepus americanus, Erxl. *Great Northern Hare.*
Cran. 237, 797, 1238, 1360.	**Skel.**	Lepus callotis, Wagler. *Jackass Rabbit.*
Cran. 240, 241, 242, 243.	**Skel.** 164.	Lepus sylvaticus, Bach. *Eastern Gray Rabbit.*
Cran. 972, 987, 988, 989.	**Skel.**	Lepus sylvaticus nuttali (Bach), Allen. *Sage Rabbit.*
Cran. 238.	**Skel.**	Lepus palustris, Bach. *Marsh Rabbit.*

SUB-CLASS **Didelphia.**

ORDER **Marsupialia.**

SUB-ORDER **DIDELPHIMORPHIA.**

Family DIDELPHIDÆ: *Opossums.*

Cran. 212, 213, 787, 945.	**Skel.** 1, 162, 163.	Didelphys virginianus, Shaw. *Common Opossum.*

LIST OF CRANIA AND SKELETONS OF FOREIGN AND DOMESTIC MAMMALS.

CLASS **MAMMALIA.**

SUB-CLASS **Placentalia.**

SUPER-ORDER **EDUCABILIA.**

ORDER **Primates.**

SUB-ORDER **ANTHROPOIDEA.**

Family SIMIIDÆ.

Sub-Family *Simiinæ.*

Cran. **Skel.** 1407. Simia satyrus, Linn. *Orang Outang.*

Family CYNOPITHECIDÆ.

Sub-Family *Cynopithicinæ.*

Cran. **Skel.** 1066. Cercopithecus fuliginosus, Cuvier. *Moor Ape Monkey.*

Cran. **Skel.** 1299. Cercopithecus pygerythus, Cuvier. *Vervet.*

Cran. **Skel.** 1300. Macacus senicus (Desm.), Gray. *Capped Macaque.*

Cran. **Skel.** 1382. Macacus cynomolgus, Desm. *The Kra.*

Cran. **Skel.** 1297. Cynocephalus porcarius, Desm. *Chacma.*

Family CEBIDÆ.

Sub-Family *Mycetinæ.*

Cran. **Skel.** 1298. Mycetes seniculus, Kuhl. *Golden Howler.*

Sub-Family *Cebinæ.*

Cran. **Skel.** 1296. Ateles paniscus, Geoff. *Spider Monkey.*

Family MIDIDÆ.

Cran. **Skel.** 1302. Œdipus titi, Lesson. *Pinche.*

SUB-ORDER **PROSIMIÆ.**

Family TARSIIDÆ.

Cran. **Skel.** 1301. Tarsius spectrum, Geoff. *Tarsius.*

Order **Feræ.**

Sub-Order **FISSIPEDIA.**

Family Felidæ: *Cats, etc.*

Sub-Family *Felinæ:* Typical Cats.

Cran.	Skel.	
95, 181, 182, 183.	20, 683, 580.	Felis domesticus, Linn. *Common Cat.*
Cran.	Skel.	
	1307.	Felis tigris, Cuv. *Bengal Tiger.*

Family Canidæ: *Dogs, Wolves, etc.*

Sub-Family *Caninæ:* Typical Dogs.

Cran.	Skel.	
29, 35, 187, 188, 739.	76.	Canis familiaris, Linn. *Common Dog.*

Family Mustelidæ: *Martins, Weasels, etc.*

Sub-Family *Mustelinæ;* Typical Weasles.

Cran.	Skel.	
723.		Mustela martes, Brisson. *Forest Mink.*
Cran.	Skel.	
724.		Putorius fœtidus, Linn. *European Iltis.*
Cran.	Skel.	
730.		Putorius vulgaris (Briss.). *Field Weasel.*
Cran.	Skel.	
732.		Putorius erminea (Linn.). *Great Weasel.*

Sub-Family *Melinæ:* Badgers.

Cran.	Skel.	
736.		Meles taxus, Schreber. *European Badger.*

Sub-Family *Lutrinæ:* Otters.

Cran.	Skel.	
740.		Lutra vulgaris, Linn. *European Otter.*

Order **Ungulata.**

Sub-Order **ARTIODACTYLI.**

Family Bovidæ: *Bovines.*

Sub-Family *Bovinæ:* Typical Bovines.

Cran.	Skel.	
50.	802.	Bos taurus (Linn.), Cuvier. *Cow.*

Sub-Family *Antilopinæ:* European Antelope; Chamois, etc.

Cran.	Skel.	
738.	871.	Rupicapra tragus, Linn. *Chamois.*

Sub-Family *Caprinæ:* Goats, etc.

Cran.	Skel.	
254, 255, 256.	106.	Capra hircus. *Common Goat.*

Sub-Family *Ovinæ:* Sheep.

Cran.	Skel.	
257, 619, 620.		Ovis aries, Linn. *Common Sheep.*

Family PHACOCHŒRIDÆ.

Cran.	Skel.	
1309.		Phacochœrus æliani, Gretz. *Wart Hog.*

Family SUIDÆ: *Swine.*

Cran.	Skel.	
47, 52, 245, 246.	123, 853, 856.	Sus scrofa, Linn. *Common Hog.*

SUB-ORDER **PERISSODACTYLI.**

Family EQUIDÆ: *Horses, etc.*

Cran.	Skel.	
34.	801.	Equus caballus, Linn. *Horse.*
1408.		Equus asinus caballus, Linn. *Mule.*

SUPER-ORDER **INEDUCABILIA.**

ORDER **Chiroptera.**

SUB-ORDER **ANIMALIVORA.**

Family VESPERTILIONIDÆ.

Sub-Family *Vespertilioninæ.*

Cran.	Skel.	
731.		Vesperugo noctula, Blas. *Shining Bat.*
728.		Vesperugo pipistrellus, Blas. *Common European Bat.*
729.		Vesperugo discolor, Blas. *Parti-colored Bat.*
727.		Plecotus auritus (Linn.), Geoff. *Long-eared Bat.*

ORDER **Insectivora.**

SUB-ORDER **INSECTIVORA VERA.**

Family TALPIDÆ: *Moles.*

Sub-Family *Talpinæ:* Typical Moles.

Cran.	Skel.	
734, 735.		Talpa europæa, Linn. *Black Mole.*

Family SORICIDÆ: *Shrews.*

Cran. 733. **Skel.** Crocidura araneus (Schreber.). *Common Shrew.*

Family ERINACEIDÆ: *Hedgehogs.*

Sub-Family *Erinaceinæ:* Typical Hedgehogs.

Cran. 725. **Skel.** Erinaceus europæus, Linn. *Hedgehog.*

ORDER **Glires.**

SUB-ORDER **SIMPLICIDENTATI.**

Family MURIDÆ: *Rats, Mice, etc.*

Sub-Family *Murinæ:* Typical Mice.

Cran. 726. **Skel.** Arvicola amphibius, Linn. *Water-Rat.*

Family CAVIIDÆ: *Cavies, etc.*

Cran. 869, 870, 908, 909. **Skel.** 872. Cavia cabaya, Linn. *Guinea Pig.*

SUB-ORDER **DUPLICIDENTATI.**

Family LEPORIDÆ: *Rabbits, Hares, etc.*

Cran. 737. **Skel.** Lepus timidus, Linn. *European Hare.*

Cran. 234, 235, 236, 1023. **Skel.** 48. Lepus cuniculus, Linn. *English Rabbit.*

Cran. **Skel.** 818. Lepus madagascarensis, Linn. *Lop-eared Rabbit.*

ORDER **Bruta.**

SUB-ORDER **TARDIGRADA.**

Family BRADYPODIDÆ.

Sub-Family *Cholœpodinæ.*

Cran **Skel.** 1303. Cholœpus hoffmanii, Gray. *Two-toed Sloth.*

Sub-Class **Didelphia.**

Order **Marsupialia.**

Sub-Order **SYNDACTYLI.**

Family Phalangistidæ.

Sub-Family *Phalangistinæ.*

Cran. **Skel.** 1306. Phalangista vulpina, Desm. *Australian Opossum.*

Sub-Class **Ornithodelphia.**

Order **Monotremata.**

Sub-Order **TACHYGLOSSA.**

Family Tachyglossidæ.

Cran. **Skel.** 1305. Echidna aculeata, Gray. *Porcupine Ant-eater.*

Sub-Order **PLATYPODA.**

Family Ornithorhynchidæ.

Cran. **Skel.** 1304. Ornithorhynchus anatinus, Shaw. *Duck-bill Platypus.*

LIST OF CRANIA, SKELETONS, AND STERNA OF BIRDS.

Note.—The Classification adopted is that of Dr. Elliot Coues, U. S. A., in his *Key to North American Birds*, 1872, and the nomenclature corresponds with his *Check List of North American Birds*, 1873.

Class **AVES.**

Order **Passeres:** Perchers.

Sub-Order **OSCINES:** Singing Birds.

Family Turdidæ: *Thrushes.*

Sub-Family *Turdinæ:* Typical Thrushes.

Cran. 33, 56, 294, 295. **Skel.** 46. Turdus migratorius (L.). *Robin.*

Cran. 296, 297, 298. **Skel.** Turdus mustelinus, Gm. *Wood Thrush.*

Cran. 303.	Skel.	Turdus pallasi, Cab., var. Nanus (Aud.), Cs. *Dwarf Thrush.*
Cran. 304.	Skel.	Turdus Swainsoni, Cab. *Olive-backed Thrush.*
Cran. 299, 300, 301, 302.	Skel.	Turdus fuscescens, Steph. *Wilson's Thrush; Veery.*

Sub-Family *Miminæ:* Mocking Thrushes.

Cran. 340, 341.	Skel. 883.	Mimus polyglottus (L.), Boie. *Mockingbird.*
Cran. 342, 343, 344, 345.	Skel.	Mimus carolinensis (L.), Gr. *Catbird.*
Cran. 346, 347.	Skel. 45.	Harporhynchus rufus (L.), Cab. *Brown Thrush; Thrasher.*
Cran.	Stern. 1478.	Harporhynchus curvirostris (Sw.), Cab., var. palmeri, Ridg. *Curve-billed Thrush.*
Cran.	Stern. 1465.	Harporhynchus crissalis, Henry. *Red-vented Thrush.*

Family Saxicolidæ: *Stone Chats.*

Cran. 305, 306, 307.	Skel. 1109.	Sialia sialis (L.), Haldeman. *Eastern Bluebird.*

Sub-Family *Polioptilinæ:* Gnatcatchers.

Cran. 355, 356.	Skel.	Polioptila cærulea, Scl. *Blue-Gray Gnatcatcher.*

Family Paridæ: *Titmice.*

Cran.	Skel. 354.	Lophophanes bi-color (L.), Bp. *Tufted Titmouse.*
Cran. 1495.	Stern. 1496.	Lophophanes inornatus (Gamb.), Cass. *Plain Titmouse.*
Cran.	Stern. 1476.	Lophophanes wollweberi, Bp. *Bridled Titmouse.*
Cran. 357, 358.	Skel.	Parus atricapillus, L. *Black-capped Chickadee.*

Cran. 1371, 1372, 1373, 1374.	**Skel.**		Parus atricapillus, L., var. carolinensis (Aud.), Cs. *Carolina Chickadee.*

Family SITTIDÆ: *Nuthatches.*

Cran. 350, 351.	**Skel.**		Sitta carolinensis, Gm. *White-bellied Nuthatch.*
Cran. 352, 353.	**Skel.**		Sitta canadensis, L. *Red-bellied Nuthatch.*

Family CERTHIIDÆ: *Creepers.*

Cran.	**Stern.** 1507.		Certhia familiaris, L. *Brown Creeper.*
Cran. 1516.	**Skel.** 1402.	**Stern.** 1517.	Campylorhynchus brunneicapillus (Lafr.), Gr. *Brown-headed Creeper-Wren.*

Family TROGLODYTIDÆ: *Wrens.*

Cran. 349.	**Skel.**		Troglodytes ædon, V. *House Wren.*
Cran. 1513.	**Skel.**		Troglodytes ædon, V., var. parkmanni (Aud.), Cs. *Western House Wren.*
Cran. 348.	**Skel.**		Telmatodytes palustris (Nils.), Cab. *Long-billed Marsh Wren.*
Cran. 1348.	**Skel.**		Cistothorus stellaris (Licht.), Cab. *Short-billed Marsh Wren.*

Family ALAUDIDÆ: *Larks.*

Cran. 359, 913, 914.	**Skel.** 1434.	**Stern.** 1430.	Eremophila alpestris (Forst.), Boie. *Horned Lark; Shore Lark.*

Family SYLVICOLIDÆ: *American Warblers.*

Cran. 309, 310.	**Skel.**		Parula americana (L.), Bp. *Blue Yellow-backed Warbler.*
Cran. 1349.	**Stern.** 1350.		Helminthophaga peregrina (Wils.), Cal. *Tennessee Warbler.*
Cran. 321, 322, 1330, 1332.	**Stern.** 1331.		Dendrœca æstiva (Gm.), Bd. *Summer Warbler.*
Cran. 316.	**Skel.**		Dendrœca virens (Gm.), Bd. *Black-throated Green Warbler.*
Cran. 315.	**Skel.**		Dendrœca cærulescens (L.), Bd. *Black-throated Blue Warbler.*

Cran. 325, 326.	**Skel.**		Dendrœca coronata (L.), Gr. *Yellow-rumped Warbler; Myrtle Bird.*
Cran. 327.	**Skel.**		Dendrœca blackburniæ (Gm.), Bd. *Blackburnian Warbler.*
Cran. 323, 324.	**Skel.**		Dendrœca striata (Forst.), Bd. *Black-poll Warbler.*
Cran. 317, 318.	**Skel.**		Dendrœca castanea (Wils.), Bd. *Bay-breasted Warbler.*
Cran. 319, 320.	**Skel.** 1347.	**Stern.** 1347.	Dendrœca pennsylvanica (L.), Bd. *Chestnut-sided Warbler.*
Cran. 328.	**Skel.**		Dendrœca discolor (V.), Bd. *Prairie Warbler.*
Cran. 311, 312, 313, 314.	**Skel.**		Geothlypis trichas (L.), Cab. *Maryland Yellow-throat.*
Cran. 1431.	**Stern.** 1432.		Geothlypis macgillvrayi (Aud.), Bd. *Macgillivray's Warbler.*
Cran. 393.	**Skel.**		Icteria virens (L.), Bd. *Yellow-breasted Chat.*
Cran. 329, 330, 331, 332.	**Skel.**		Setophaga ruticilla (L.), Sw. *Redstart.*

Family TANAGRIDÆ: *Tanagers.*

Cran. 308.	**Skel.**		Pyranga rubra (L.), V. *Scarlet Tanager.*
Cran. 1510.	**Skel.**		Pyranga æstiva (L.), V., var. cooperi (Ridg.), Cs. *Cooper's Tanager.*
Cran. 1497.	**Skel.**		Pyranga hepatica, Sw. *Hepatic Tanager.*

Family HIRUNDINIDÆ: *Swallows.*

Cran. 1449.	**Skel.** 187.	**Stern.** 1521.	Hirundo horreorum, Barton. *Barn Swallow.*
Cran. 335, 551, 1013, 1014.	**Skel.** 101.		Tachycineta bicolor (V.), Cs. *White-bellied Swallow.*

Cran. 333, 334.	Skel.	Petrochelidon lunifrons (Say), Cab.	*Cliff Swallow; Eave Swallow.*
Cran. 1514.	Stern. 1513.	Stelgidopteryx serripennis (Aud.), Bd.	*Rough-winged Swallow.*
Cran.	Skel. 1506.	Progne purpurea (L.), Boie.	*Purple Martin.*

Family AMPELIDÆ: *Waxwings.*

Cran. 32, 64, 65, 336.	Skel.	Ampelis cedrorum (V.), Bd.	*Cedar Bird; Cherry Bird.*

Family VIREONIDÆ: *Greenlets.*

Cran. 337, 338, 339.	Skel.	Vireo olivaceus (L.), V.	*Red-eyed Vireo.*
Cran. 1460.	Stern. 1461.	Vireo vicinior, Coues.	*Gray Vireo.*

Family LANIIDÆ: *Shrikes.*

Cran.	Stern. 1474.	Collurio borealis (V.), Bd.	*Great Northern Shrike; Butcher-bird.*

Family FRINGILLIDÆ: *Finches.*

Cran. 382, 1372.	Skel.	Carpodacus purpureus (Gm.), Gr.	*Purple Finch.*
Cran. 1501.	Skel. 1519.	Stern. 1502. Carpodacus frontalis (Say), Gr.	*Crimson-fronted Finch; House Finch.*
Cran. 374.	Skel.	Loxia curvirostra, L., var. americana (Wils.), Cs.	*Common Crossbill.*
Cran. 375, 376, 1376.	Skel. 1207.	Chrysomitris tristis (L.), Bp.	*American Goldfinch; Yellow-bird.*
Cran. 1493.	Stern. 1494.	Chrysomitris psaltria (Say), Bp.	*Arkansas Goldfinch.*
Cran. 383, 384, 385.	Stern. 1335.	Passerculus savanna (Wils.), Bp.	*Savannah Sparrow.*
Cran. 369, 370.	Skel.	Melospiza palustris (Wils.), Bd.	*Swamp Sparrow.*
Cran. 392, 1379.	Skel.	Melospiza melodia (Wils.), Bd.	*Song Sparrow.*

Cran. 976.	**Skel.**	Melospiza melodia (Wils.), Bd. var. fallax (Bd.), Ridg. *Gray Song-Sparrow.*
Cran. 386, 387, 388, 389.	**Skel.** 4.	Junco hyemalis (L.), Scl. *Snowbird.*
Cran. 1518.	**Skel.**	Junco cinereus (Sw.), Cab., var. caniceps (Woodh.), Cs. *Cinereous Snow Bird.*
Cran. 390, 1378.	**Skel.**	Spizella monticola (Gm.), Bd. *Tree Sparrow.*
Cran. 381.	**Skel.**	Spizella socialis (Wils.), Bp. *Chipping Sparrow.*
Cran. 1488.	**Skel.**	Spizella socialis (Wils.), Bp., var. arizonæ, Cs. *Arizona Chipping Sparrow.*
Cran. 380, 1447.	**Stern.** 1448.	Spizella pusilla (Wils.), Bp. *Field Sparrow.*
Cran. 1503, 1504.	**Stern.** 1505.	Spizella pallida (Sw.), Bp. var. breweri (Cass.), Cs. *Brewer's Sparrow.*
Cran. 371, 372, 373, 1377.	**Skel.**	Zonotrichia albicollis (Gm.), Bp. *While-throated Sparrow.*
Cran. 368.	**Skel.**	Passerella iliaca (Merrem.), Sw. *Fox Sparrow.*
Cran. 1486.	**Stern.** 1487.	Calamospiza bicolor (Towns.), Bp. *Lark Bunting; White-winged Blackbird.*
Cran. 367.	**Skel.**	Euspiza americana (Gm.), Bp. *Black-throated Bunting.*
Cran. 1345.	**Skel.** 1136. **Stern.** 1346.	Goniaphea ludoviciana (L.), Bowdich. *Rose-breasted Grosbeak.*
Cran. 1511.	**Stern.** 1512.	Goniaphea melanocephala (Sw.), ———. *Black-headed Grosbeak.*
Cran. 391.	**Skel.**	Cyanospiza cyanea (L.), Bd. *Indigo Bird.*
Cran. 40, 360, 361, 362.	**Stern.** 1278.	Cardinalis virginianus (Brisson), Bp. *Cardinal Redbird.*

Cran. 363, 364, 365, 366.	**Skel.**		Pipilo erythrophthalmus (L.), V. *Towhee Bunting; Chewink.*
Cran. 1489.	**Skel.**		Pipilo fuscus, Sw. *Brown Towhee; Cañon Finch.*
			Family ICTERIDÆ: *American Starlings.*
Cran. 37, 79, 394, 395.	**Skel.** 584.	**Stern.** 1344.	Dolichonyx oryzivorus (L.), Sw. *Bobolink; Reed-bird; Ricebird.*
Cran. 396.	**Skel.** 1325.		Molothrus ater (Gm.), Sw. *Cowbird.*
Cran. 70, 397, 398, 399.	**Skel.** 117.		Agelæus phœniceus (L.), V. *Red-winged Blackbird.*
Skel. 1492.	**Stern.** 1479.		Xanthocephalus icterocephalus (Br.), Bd. *Yellow-headed Blackbird.*
Cran. 400, 401, 402.	**Skel.** 14.		Sturnella magna (L.), Sw. *Field-Lark; Meadow-Lark.*
Cran	**Stern.** 1471.		Sturnella magna (L.), Sw. var. neglecta (Aud.), All. *Western Field-Lark.*
Cran. 403.	**Skel.**		Icterus baltimore (L.), Daudin. *Baltimore Oriole.*
Cran. 1472, 1525.	**Skel.**		Icterus bullockii (Sw.), Bp. *Bullock's Oriole.*
Cran. 404, 405, 406.	**Skel.** 809.		Scolecophagus ferrugineus (Gm.), Sw. *Rusty Grackle.*
Cran. 939.	**Stern.** 1473.		Scolecophagus cyanocephalus (Magl.), Cab. *Blue-headed Grackle.*
Cran. 39, 407, 408, 409.	**Skel.** 824.	**Stern.** 1279.	Quiscalus purpureus (Bartr.), Licht. *Purple Grackle; Crow Blackbird.*

Family CORVIDÆ: *Crows.*

Sub-Family *Corvinæ:* Ravens and Crows.

Cran. 410, 707, 927, 1467.	**Skel.**		Corvus corax, Linn. *Raven.*
Cran. 411.	**Skel.**		Corvus cryptoleucus, Couch. *White-necked Raven.*
Cran. 412, 413, 838.	**Skel.** 133.		Corvus americanus, Aud. *Common Crow.*
Cran. 414.	**Skel.**		Corvus ossifragus, Wils. *Fish Crow.*
Cran. 926, 979, 1391.	**Skel.**		Picicorvus columbianus (Wils.), Bp. *Clarke's Crow.*
Cran. 971.	**Skel.**		Gymnokitta cyanocephala, Maxim. *Blue Crow.*

Sub-Family *Garrulinæ:* Jays.

Cran.	**Skel.** 1400.		Pica melanoleuca, V., var. nuttalli (Aud.), Cs. *Yellow-billed Magpie.*
Cran. 415, 416, 417, 418.	**Skel.** 115.		Cyanurus cristatus (L.), Sw. *Blue Jay.*
Cran.	**Stern.** 1469.		Aphelocoma floridana (Bartr.), Cab., var. Woodhousei (Bd.), All. *Woodhouse's Jay.*
Cran. 419.	**Skel.**		Perisoreus canadensis (L.), Bp. *Canada Jay.*

SUB-ORDER **Clamatores.**

Family TYRANNIDÆ: *American Flycatchers.*

Cran. 291, 292, 1340, 1341.	**Skel.** 1339.	**Stern.** 1342.	Tyrannus carolinensis (L.), Bd. *Kingbird; Bee-Martin.*
Cran. 293.	**Skel.**		Contopus virens (L.), Cab. *Wood Pewee.*
Cran. 1508.	**Skel.** 1498.	**Stern.** 1509.	Contopus virens (L.), Cab., var. richardsonii (Sw.), Cs. *Western Wood Pewee.*

ORDER **Picariæ:** Picarian Birds.

SUB-ORDER **CYPSELI**: Cypseliform Birds.

Family CAPRIMULGIDÆ: *Goatsuckers.*

Cran.	**Skel.** 861.	Antrostomus vociferus (Wils.), Bp. *Whippoorwill; Night-Jar.*

Family CYPSELIDÆ: *Swifts.*

Cran. 1500.	**Skel.**	Panyptila saxatilis (Woodh.), Cs. *White-throated Swift.*
Cran.	**Skel.** 171.	Chætura pelasgia (L.), Steph. *Chimney Swift.*

Family TROCHILIDÆ: *Humming-Birds.*

Cran. 290.	**Skel.**	Trochilus colubris, L. *Ruby-throated Humming-Bird.*
Cran. 1456, 1457, 1458.	**Stern.** 1459.	Trochilus alexandri, Bourc. *Black-chinned Humming-Bird.*
Cran. 1453, 1454.	**Stern.** 1455.	Selasphorus rufus (Gm.), Sw. *Rufous-backed Humming-Bird.*
Cran. 1449, 1450, 1451.	**Stern.** 1452.	Selasphorus platycercus (Sw.), Gld. *Broad-tailed Humming-Bird.*
Cran.	**Stern.** 1522.	Stellula calliope (——), Gld. *Calliope Humming-Bird.*

Family ALCIDINIDÆ: *Kingfishers.*

Cran.	**Skel.** 155.	Ceryle alcyon (L.), Boie. *Belted Kingfisher.*

Family CUCULIDÆ: *Cuckoos.*

Cran. 1466.	**Stern.** 1404.	Geococcyx californianus (Less.), Bd. *Ground Cuckoo; Chaparral Cock.*
Cran. 281.	**Skel.**	Coccyzus erythrophthalmus (Wils.), Bd. *Black-billed Cuckoo.*
Cran. 278, 279, 280.	**Skel.**	Coccyzus americanus (L.), Bp. *Yellow-billed Cuckoo.*

Family PICIDÆ: *Woodpeckers.*

Cran. 621, 718.	**Skel.** 550.	Hylotomus pileatus (L.), Bd. *Pileated Woodpecker; Log-cock.*

Cran.	**Skel.** 1400.		Picus scalaris, Wagl. var. nuttalli (Gamb.), Cs. *Nuttall's Woodpecker.*
Cran. 602, 1370.	**Skel.**		Picus villosus, L. *Hairy Woodpecker.*
Cran. 1491.	**Stern.** 1477.		Picus villosus, L., var. harrisi (Aud.), All. *Harris' Woodpecker.*
Cran. 282, 283.	**Skel.**		Picus pubescens, L. *Downy Woodpecker.*
Cran.	**Stern.** 1475.		Picoides americanus, Brehm., var. dorsalis (Bd.), All. *Striped-backed Woodpecker.*
Cran. 1336.	**Skel.** 811.	**Stern.** 1276.	Sphyrapicus varius (L.), Bd. *Yellow-bellied Woodpecker.*
Cran.	**Stern.** 1397.		Sphyrapicus thyroideus (Cass.), Bd. *Brown-headed Woodpecker.*
Cran.	**Skel.** 1483.		Centurus uropygialis, Bd. *Gila Woodpecker.*
Cran. 284, 285, 1337.	**Skel.** 1106.	**Stern.** 1338.	Melanerpes erythrocephalus (L.), Sw. *Red-headed Woodpecker.*
Cran. 286, 287, 288, 289.	**Skel.** 118.	**Stern.** 1327.	Colaptes auratus (L.), Sw. *Golden-winged Woodpecker; Flicker.*
Cran.	**Stern.** 1470.		Colaptes mexicanus, Sw. *Red-shafted Woodpecker.*

ORDER **Psittaci:** Parrots.

Family ARIDÆ: *Parroquets.*

Cran. 277.	**Skel.**	Conurus carolinensis (L.), Kuhl. *Carolina Parroquet.*

ORDER **Raptores:** Birds of Prey.

Family STRIGIDÆ: *Owls.*

Cran. 1351.	**Skel.**		Strix flammea, L., var. americana (Aud.), Cs. *Barn Owl.*
Cran. 270, 837.	**Skel.** 860.		Bubo virginianus (Gm.), Bp. *Great Horned Owl.*
Cran. 274.	**Skel.** 610.		Scops asio (L.), Bp. *Screech Owl; Mottled Owl.*
Cran.	**Skel.** 603.	**Stern.** 1241.	Otus vulgaris (L.), var. wilsonianus (Less.), All. *Long-eared Owl.*

Cran. 273, 788.	Skel. 591.		Brachyotus palustris (Bechst), Bp. *Short-eared Owl.*
Cran. 272.	Skel. 156.		Syrnium nebulosum (Forst.), Gr. *Barred Owl.*
Cran. 271.	Skel.		Nyctea nivea (Daud.), Gr. *Snowy Owl.*
Cran. 897.	Skel.		Nyctale acadica (Gm.), Bp. *Acadian Owl; Saw-whet Owl.*
Cran.	Stern. 1403.		Glaucidium passerinum (L.), Bp., var. californicum (Scl.), Ridg. *Pygmy Owl.*

Family FALCONIDÆ: *Diurnal Birds of Prey.*

Cran. 268, 921.	Skel.		Circus cyaneus (L.), Lacép., var. hudsonius (L.), Cs. *Marsh Hawk; Harrier.*
Cran. 949, 1294.	Skel. 604.	Stern. 1295.	Accipiter fuscus (Gm.), Bp. *Sharp-shinned Hawk; Pigeon Hawk.*
Cran. 266, 717.	Skel. 800.		Accipiter cooperi, Bp. *Cooper's Hawk; Chicken Hawk.*
Cran. 265.	Skel. 139.		Astur atricapillus (Wils.), Bp. *Goshawk.*
Cran. 922.	Skel.		Falco (Hiero-falco) gyrfalco (Linn.), var. islandicus Sabine.
Cran.	Stern. 1386.		Falco mexicanus (Licht.), var. polyagrus, Ridg. *Lanier Falcon.*
Cran. 923.	Skel.		Falco communis *Variorum. Peregrine Falcon; Duck Hawk.*
Cran. 924, 269.	Skel.		Falco columbarius, L. *Pigeon Hawk.*
Cran. 263, 264, 716.	Skel. 15.		Buteo borealis (Gm.), V. *Red-tailed Buzzard; Hen Hawk.*
Cran. 1485.	Skel. 1369.	Stern. 1462.	Buteo borealis (Gm.), V., var. calurus (Cass.), Ridg. *Western Red-tailed Buzzard.*
Cran. 267, 708.	Skel.		Buteo lineatus (Gm.), Jard. *Red-shouldered Buzzard.*
Cran.	Stern. 1385.		Buteo swainsoni, Bp. *Swainson's Buzzard.*

Cran. 936, 937, 938.	**Skel.**	Archibuteo lagopus (Brunn.), Gr., var. sancti-johannis (Gm.), Ridg. *Rough-legged Buzzard.*
Cran.	**Stern.** 1463.	Asturina plagiata, Schlegel. *Gray Hawk.*
Cran.	**Skel.** 135.	Pandion haliaetus (L.), Savigny. *Fish Hawk; Osprey.*
Cran. 891, 1197.	**Skel.** 796.	Aquila chrysaetus, (L.). *Golden Eagle.*
Cran. 836. 892, 893,	**Skel.** 583.	Haliaetus leucocephalus (L.), Savigny. *White-headed Eagle; Bald Eagle.*

Family CATHARTIDÆ: *American Vultures.*

Cran. 709.	**Skel.** 138.	Cathartes aura (L.), Illiger. *Turkey Buzzard.*

ORDER **Columbæ:** Pigeons, etc.

Family COLUMBIDÆ: *Pigeons.*

Cran. 1490.	**Skel.**	Columba fasciata, Say. *Band-tailed Pigeon.*
Cran. 424.	**Skel.** 958.	Ectopistes migratorius (L.), Sw. *Wild Pigeon.*
Cran. 425, 426, 427, 428.	**Skel.** 114.	Zenædura carolinensis (L.), Bp. *Carolina Dove.*

ORDER **Gallinæ:** Gallinaceous Birds.

Family MELEAGRIDIDÆ: *Turkeys.*

Cran. 429, 430.	**Skel.** 141.		Meleagris gallopavo, L. *Turkey.*
Cran. 965, 966, 1446,	**Skel.** 1390, 1445, 1446.	**Stern.** 1446.	Meleagris gallopavo, L., var. americana (Bartr.), Cs. *Common Wild Turkey.*

Family TETRAONIDÆ: *Grouse, etc.*

Sub-Family *Tetraoninæ:* Grouse.

Cran. 435.	**Skel.**	Tetrao canadensis, L. *Canada Grouse; Spruce Partridge.*
Cran. 1426.	**Stern.** 1427.	Centrocercus urophasianus (Bp.), Sw. *Sage Cock; Cock-of-the-plains.*

Cran. 436, 1429.	**Skel.** 1428.		Pediœcetes phasianellus (L.), Ell. *Northern Sharp-tailed Grouse.*
Cran. 437, 438, 439.	**Skel.** 140.		Cupidonia cupido (L.), Bd. *Pinnated Grouse; Prairie Hen.*
Cran.	**Skel.** 126.		Bonasa umbellus (L.), Steph. *Ruffed Grouse; Partridge; Pheasant.*
Cran. 940.	**Skel.**		Lagopus albus (Gm.), Aud. *Willow Ptarmigan.*

Sub-Family *Odontophorinæ:* American Partridge.

Cran. 31, 77, 78, 440.	**Skel.** 125.	**Stern.** 1280.	Ortyx virginianus (L.), Bp. *Virginia Partridge; Quail; Bob-white.*
Cran. 925.	**Skel.**		Oreortyx pictus (Dougl.), Bd. *Plumed Partridge.*
Cran. 973.	**Skel.**		Lophortyx californicus (Shaw), Bp. *California Partridge.*
Cran. 1392.	**Skel.** 1389.	**Stern.** 1393.	Cyrtonyx massena (Less.), Gld. *Massena Partridge.*

ORDER **Grallatores:** Wading Birds.

SUB-ORDER **LIMICOLÆ:** Shore Birds.

Family CHARADRIIDÆ: *Plover.*

Sub-Family *Charadriinæ:* True Plover.

Cran. 868, 920.	**Skel.** 867.		Charadrius fulvus, Gm., var. virginicus (Borck.), Cs. *Golden Plover.*
Cran. 606, 607, 991.	**Skel.** 150.		Ægialitis vociferus (L.), Cass. *Kildeer Plover.*

Family RECURVIROSTRIDÆ: *Avocets.*

Cran.		**Stern.** 1387.	Recurvirostra americana, Gm. *Avocet.*
Cran.	**Skel.** 1359.		Himantopus nigricollis, V. *Stilt.*

Family PHALAROPODIDÆ: *Phalaropes.*

Cran. 1435, 1436.	**Stern.** 1437.		Steganopus wilsoni (Sab.), Cs. *Wilson's Phalarope.*

Family SCOLOPACIDÆ: *Snipe, etc.*

Cran. 449.	**Skel.** 116.		Philohela minor (Gm.), Gr. *American Woodcock.*
Cran. 450, 898.	**Skel.** 151.	**Stern.** 1292.	Gallinago wilsoni (Temm.), Bp. *American Snipe; Wilson's Snipe.*
Cran. 1481.	**Skel.** 1480.	**Stern.** 1482.	Ereunetes pusillus (L.), Cass. *Semi-palmated Sandpiper.*
Cran. 1343.	**Skel.** 862.		Tringa maculata V. *Pectoral Sandpiper.*
Cran. 451.	**Skel.**		Tringa alpina, L., var. americana, Cass. *American Dunlin.*
Cran. 456.	**Skel.**		Limosa fedoa (L.), Ord. *Great Marbled Godwit.*
Cran.	**Skel.** 1293.		Totanus melanoleucus, Gm. *Greater Tell-tale.*
Cran. 452.	**Skel.** 102.		Totanus flavipes, Gm. *Yellow-Shanks.*
Cran. 453.	**Skel.**		Totanus solitarius, Wils. *Solitary Tattler.*
Cran. 454, 455.	**Skel.**		Tringoides macularius (L.), Gr. *Spotted Sandpiper.*
Cran.	**Skel.** 1425.		Açtiturus bartramius (Wils.), Bp. *Bartramian Sandpiper; Upland Plover.*
Cran. 458, 459, 1079.	**Skel.**		Numenius longirostris, Wils. *Long-billed Curlew.*
Cran. 457.	**Skel.**		Numenius hudsonicus, Lath. *Hudsonian Curlew.*
Cran. 928, 929.	**Skel.**		Numenius borealis (Forst.), Lath. *Esquimaux Curlew.*

SUB-ORDER **HERIODIONES**: Herons and their allies.

Family TANTALIDÆ: *Ibises, etc.*

Sub-Family *Ibidinæ:* True Ibises.

Cran. 448.	**Skel.**		Ibis falcinellus, *Auct.*, var. ordii (Bp.), All. *Glossy Ibis.*
Cran. 447, 1162.	**Skel.**		Ibis alba (L.), V. *White Ibis.*
Cran. 1016, 1163.	**Skel.**		Platalea ajaja, L. *Roseate Spoonbill.*

Family ARDEIDÆ: *Herons.*

Sub-Family *Ardeinæ:* True Herons.

Cran. 1012.	**Skel.** 582.	Ardea herodias, L. *Great Blue Heron.*
Cran. 442.	**Skel.**	Ardea leucogastra, Gm., var. leucoprymna (Licht.), Cs. *Louisiana Heron.*
Cran. 443, 444, 445.	**Skel.** 511.	**Stern.** 1281. Ardea virescens, L. *Green Heron.*
Cran. 446.	**Skel.**	Nyctiardea grisea (L.), Steph., var. nævia (Bodd.), Allen. *Night Heron.*
Cran.	**Skel.** 1289.	Botaurus minor (Gm.). *Bittern; Indian Hen.*

SUB-ORDER **ALECTORIDES**: Cranes, Rails, etc.

Family GRUIDÆ: *Cranes.*

Cran. 441.	**Skel.**	Grus canadensis (L.), Temm. *Brown Crane; Sandhill Crane.*

Family RALLIDÆ: *Rails.*

Sub-Family *Rallinæ:* True Rails.

Cran. 977.	**Skel.**	Rallus virginianus, L. *Virginia Rail.*
Cran. 461, 466.	**Skel.**	Porzana carolina (L.), V. *Carolina Rail; Sora; Ortolan.*
Cran. 462, 463, 464.	**Skel.** 124.	Fulica americana, Gm. *Coot.*

ORDER **Lamellirostres**: Anserine Birds.

Family ANATIDÆ: *Swan, Geese, and Ducks.*

Sub-Family *Cygninæ:* Swans.

Cran. 465, 901, 902.	**Skel.** 12.	Cygnus americanus, Sharpless. *Whistling Swan.*

Sub-Family *Anserinæ:* Geese.

Cran. 930.	**Skel.**	Anser hyperboreus, Pall. *Snow Goose.*
Cran. 473, 479.	**Skel.**	Branta bernicla, L. *Brant Goose.*

Cran. 941, 484*a*.	**Skel.**	Branta bernicla, var. nigricans (L.), Cs. *Brant Goose.*
Cran. 470, 471, 472, 1127.	**Skel.** 17.	Branta canadensis (L.) *Canada Goose; Wild Goose.*
Cran. 931, 932, 933.	**Skel.**	Branta canadensis (L.), var. hutchinsii (Rich.), Cs. *Hutchins's Goose.*

Sub-Family *Anatinæ:* River Ducks.

Cran. 477, 478, 889.	**Skel.** 1115.	Anas boschas, L. *Mallard.*
Cran. 479.	**Skel.**	Anas obscura, Gm. *Dusky Duck.*
Cran. 480, 481.	**Stern.** 1284.	Dafila acuta (L.), Jenyns. *Pintail; Sprigtail.*
Cran. 486, 487, 488, 935.	**Skel.** 1114.	Mareca americana (Gm.), Steph. *American Widgeon; Baldpate.*
Cran. 482, 483.	**Skel.** 1117.	Querquedula carolinensis (Gm.). *Green winged Teal.*
Cran. 934.	**Skel.** 791	Querquedula discors (L.), Steph. *Blue-winged Teal.*
Cran.	**Stern.** 1388.	Querquedula cyanoptera (V.), Cass. *Cinnamon Teal.*
Cran. 484, 485, 942, 943.	**Skel.**	Spatula clypeata (L.), Boie. *Shoveller.*
Cran. 489, 490, 491.	**Skel.** 109.	Aix sponsa (L.), Boie. *Summer Duck; Wood Duck.*

Sub-Family *Fuligulinæ:* Sea Ducks.

Cran. 492.	**Skel.**		Fuligula marila (L.), Steph. *Greater Blackhead.*
Cran. 493, 494, 495.	**Skel.** 1124.		Fuligula affinis, Eyton. *Lesser Blackhead.*
Cran. 496, 497, 498.	**Skel.**		Fuligula collaris (Donovan), Bp. *Ring-necked Duck.*
Cran. 499, 500, 946, 947.	**Skel.** 1123.		Fuligula ferina (L.), Sw. var. americana (Eyton), Cs. *Red-head; Pochard.*
Cran. 501, 502, 503, 504.	**Skel.** 1125.		Fuligula vallisneria (Wils.), Steph. *Canvas-back.*
Cran. 505, 506, 507, 508.	**Skel.** 1128.	**Stern.** 1468.	Bucephala clangula (L.), Gr. *Golden-eyed Duck.*
Cran. 509, 510, 511, 512.	**Skel.** 129.		Bucephala albeola (L.), Bd. *Buffle-headed Duck.*
Cran. 514, 515, 918.	**Skel.** 1119.		Harelda glacialis (L.), Leach. *Long-tailed Duck.*
Cran. 513.	**Skel.**		Histrionicus torquatus (L.), Bp. *Harlequin Duck.*
Cran. 917.	**Skel.**		Somateria spectabilis (L.), Leach. *King Eider.*
Cran. 628, 1132.	**Skel.** 627.		Œdemia fusca (L.), Sw. (? var. velvetina, Cass). *Velvet Scoter.*
Cran. 894.	**Skel.**		Œdemia perspicillata (L.), Fleming. *Surf Duck.*

Cran. 516, 617.	**Skel.** 1111.	Erismatura rubida (Wils.), Bp. *Ruddy Duck.*

Sub-Family *Merginæ:* Mergansers.

Cran. 614, 840.	**Skel.** 8. **Stern.** 1286.	Mergus merganser, L. *Merganser; Goosander.*
Cran.	**Skel.** 1130.	Mergus serrator, L. *Red-breasted Merganser.*
Cran. 518, 519.	**Skel.** 1118.	Mergus cucullatus, L. *Hooded Merganser.*

ORDER **Steganopodes:** Totipalmate Birds.

Family PELECANIDÆ: Pelicans.

Cran. 520, 1076.	**Skel.**	Pelecanus trachyrhynchus, Lath. *White Pelican.*
Cran. 895, 1037.	**Skel.**	Pelecanus fuscus, L. *Brown Pelican.*

Family PHALACROCORACIDÆ: Cormorants.

Cran. 521.	**Skel.**	Graculus carbo (L.), Gray. *Common Cormorant; Shag.*
Cran.	**Stern.** 1287.	Graculus bicristatus (Pall.), Bd. *Red-faced Cormorant.*
Cran. 522.	**Skel.**	Plotus anhinga, L. *Anhinga; Darter.*

ORDER **Longipennes:** Long-winged Swimmers.

Family LARIDÆ: *Gulls, Terns, etc.*

Sub-Family *Lestridinæ:* Jaegers, or Skua Gulls.

Cran. 916.	**Skel.**	Stercorarius parasiticus (Brunn.), Gray. *Richardson's Jaeger.*

Sub-Family *Larinæ:* True Gulls.

Cran. 900	**Skel.** 1246.	Larus glaucescens, Licht. *Glaucous-winged Gull.*
Cran. 1055.	**Skel.** 826.	Larus argentatus, Brunn. *Herring Gull; Common Gull.*
Cran.	**Skel.** 153.	Larus delawarensis, Ord. *Ring-billed Gull.*
Cran.	**Stern.** 1248.	Larus tridactylus, L. *Kittewake.*
Cran. 525, 899.	**Skel.**	Larus philadelphia (Ord.), Cs. *Bonaparte's Gull.*

Sub-Family *Sterninæ:* Terns.

Cran. Skel. 173. Hydrochelidon fissipes (L.), Gray. *Black Tern.*

Family Procellariidæ: Petrels.

Sub-Family *Diomedeinæ*: Albatrosses.

Cran. 523. Skel. Diomedea nigripes, Aud. *Black-footed Albatross.*

Sub-Family *Procellariinæ:* True Petrels.

Cran. 524. Skel. Fregetta grallaria (V.), Bp. *White-bellied Petrel.*

Order **Pygopodes:** Diving Birds.

Family Colymbidæ: *Loons.*

Cran. 611. Skel. Colymbus torquatus, Brunn. *Loon; Great Northern Diver.*

Cran. 944. Skel. Colymbus arcticus, L. *Black-throated Diver.*

Cran. 526. Skel. Colymbus arcticus, L., var. pacificus (Lawr.), Cs. *Pacific Diver.*

Cran. 527. Skel. Colymbus septentrionalis, L. *Red-throated Diver.*

Family Podicipidæ: *Grebes.*

Cran. 919 Skel. Podiceps griseigena (Bodd.), Gray, var. holbölli (Reinh.), Cs. *Red-necked Grebe.*

Cran. 1121. Skel. 1120. Podiceps cornutus (Gm.), Lath. *Horned Grebe.*

Cran. 720. Skel. Podilymbus podiceps (L.), Lawr. *Pied-billed Dabchick.*

Family Alcidæ: *Auks.*

Cran. Stern. 1250. Phaleris psittacula (Pall.), Temm. *Paroquet Auk.*

Cran. Stern. 1251. Simorhynchus cristatellus (Pall.), Merrem. *Crested Auk.*

Cran. Stern. 1249. Simorhynchus camtschaticus (Lepech.), Schl. *Whiskered Auk.*

Cran. Skel. 1247. Uria, sp.

LIST OF CRANIA AND SKELETONS OF FOREIGN AND DOMESTIC BIRDS.

SUB-CLASS **Carinatæ**: Carinate Birds.

ORDER **Passeres**: Passerine Birds.

Family FRINGILLIDÆ: Finches, etc.

Cran. 377, 378, 379, 1010.	**Skel.** 593.	Fringilla canaria, Linn. *Canary Bird.*
Cran.	**Skel.** 1101.	Pyrrhula vulgaris, Cuv. *Bulfinch.*
Cran.	**Skel.** 1110.	Carduelis elegans, Bp. *Goldfinch.*

ORDER **Psittaci**: Parrots.

Family PSITTACIDÆ: *Typical Parrots.*

Cran. 275.	**Skel.**	Psittacus erythacus, Linn. *Red-tailed Parrot.*
Cran. 276.	**Skel.**	Chrysotis ochrocephala (Gm.). *Yellow-fronted Parrot.*

ORDER **Columbæ**: Pigeons, etc.

Family COLUMBIDÆ: Typical Pigeons.

Cran. 420, 421, 422, 423.	**Skel.**	Columba liria (domestica), Linn. *Common Pigeon.*

ORDER **Gallinæ**: Gallinaceous Birds.

Family PHASIANIDÆ: Pheasants.

Cran. 586.	**Skel.** 1044.	Pavo cristatus, Linn. *Peacock.*
Cran. 88, 431, 432, 433.	**Skel.** 41, 1365.	Gallus bankivi (var.), Temm. *Domestic Fowl.*

Family NUMIDIDÆ: Guinea Fowls.

Cran. 434. Skel. 27. Numida meleagris, Linn. *Guinea Fowl.*

ORDER **Lamellirostres:** Anserine Birds.

Family ANATIDÆ: *Swans, Geese, etc.*

Sub-Family *Anserinæ:* Geese.

Cran. 466, 467, 468, 469. Skel. Anser ferus (domesticus), Linn. *Common Goose.*

Cran. Skel. 149. Anser cygnoides, Linn. *Swan Goose.*

Sub-Family *Anatinæ: River Ducks.*

Cran. 97, 98, 475, 476. Skel. Anas boschas (domesticus), Linn. *Common Duck.*

SUB-CLASS **Ratitæ:** Struthious Birds.

ORDER **Struthiones:** Struthious Birds.

Family STRUTHIONIDÆ: Ostrich.

Cran. Skel. 1438. Struthio camelus, Linn. *Ostrich.*

Family CASUARIIDÆ: *Emeus, etc.*

Sub-Family *Dromainæ:* Emeus.

Cran. Skel. 1439. Dromæus novæ-hollandiæ, Lath. *Common Emeu.*

LIST OF CRANIA AND SKELETONS OF NORTH AMERICAN BATRACHIA AND REPTILIA.

NOTE.—The classification and nomenclature adopted are according to Prof. Edward D. Cope, in his "*Check List of North American Batrachia and Reptilia*," Bull. U. S. Nat. Mus. No. 1.

CLASS **BATRACHIA.**

ORDER **Anura.**

SUB-ORDER **RANIFORMIA.**

Family RANIDÆ: *Frogs.*

Cran.	**Skel.** 6.	Rana halecina halecina, Hall. *Gold-striped Frog; Shad Frog.*
Cran. 1107.	**Skel.** 884.	Rana palustris, Le Conte. *Yellow-legged Frog; Marsh Frog.*
Cran.	**Skel.** 60.	Rana pipiens (Linn.), Holbrook. *Bull Frog.*

SUB-ORDER **FIRMISTERNIA.**

Family ENGYSTOMIDÆ.

Cran. 1265.	**Skel.** 93.	Engystoma carolinense, Holbrook. *Chestnut-colored Frog.*

SUB-ORDER **BUFONIFORMIA.**

Family BUFONIDÆ: *Toads.*

Cran. 1541.	**Skel.** 1401.	Bufo microscaphus, Cope. *Western Toad.*
Cran. 1532.	**Skel.** 1531.	Bufo lentiginosus frontosus, Cope.
Cran. 1539.	**Skel.** 1538.	Bufo lentiginosus cognatus, Say.
Cran.	**Skel.** 80.	Bufo lentiginosus americanus, Le Conte. *American Toad.*
Cran.	**Skel.** 1102.	Bufo lentiginosus lentiginosus, var. Latr. *Red-signed Toad.*
Cran.	**Skel.** 1232.	Bufo quercicus, Holbrook. *Oak Toad.*

SUB-ORDER **ARCIFERA.**

Family HYLIDÆ: *Tree Toads.*

Cran.	**Skel.** 167.	Acris gryllus gryllus (Holbrook), Gray. *Cricket Frog.*

Order **Urodela.**

Family Plethedontidæ: *Salamanders, etc.*

Cran. **Skel.** 915. Plethedon glutinosus, Green. *Salamander.*

Cran. 549. **Skel.** Spelerpes ruber ruber, Daudin. *Red Triton.*

Family Amblystomidæ.

Cran. 964. **Skel.** 857, 863. Amblystoma mavortium, Bd. *Spotted Salamander.*

Cran. **Skel.** 679. Amblystoma tigrinum, Green. *Axolotl.*

Family Menopomidæ.

Cran. **Skel.** 165. Menopoma allegheniense, Harlan. *Alleghany Hell-Bender.*

Order **Trachystomata.**

Family Sirenidæ: *Sirens.*

Cran. **Skel.** 1322. Siren lacertina, Linn. *Mud Eel* or *Siren.*

Class **REPTILIA.**

Order **Crocodili.**

Family Crocodilidæ.

Cran. **Skel.** 819, 1185. Alligator mississippiensis, Daud. *Common Alligator.*

Order **Testudinata:** *Shield Reptiles.*

Sub-Order **CRYPTODIRA.**

Family Cheloniidæ: *Sea Turtles.*

Cran. 528, 529, 577, 675. **Skel.** Thalassochelys caonana, Linn. *Hawksbill Turtle.*

Cran. 530, 682, 789. **Skel.** Chelonia mydas, Schw. *Green Turtle.*

Family EMYDIDÆ: *Tortoises.*

Cran. 652, 653, 654, 655.	**Skel.** 9.	Pseudemys rugosa, Shaw. *Red-bellied Terrapin.*
Cran.	**Skel.** 1252.	Pseudemys concinna, Le Conte.
Cran. 533.	**Skel.**	Pseudemys scabra, Linn.
Cran. 532.	**Skel.** 154.	Malacoclemmys concentrica. *Terrapin.*
Cran. 534, 535.	**Skel.** 1019.	Chrysemys picta, Hern. *Painted Turtle.*
Cran.	**Skel.** 172.	Chelopus guttatus, Schneider. *Yellow-Spotted Turtle.*
Cran. 533.	**Skel.**	Chelopus insculptus, Le Conte. *Wood Terrapin.*
Cran. 536, 537.	**Skel.** 2.	Cistudo clausa clausa, Gmelin. *Common Land Turtle; Box Tortoise.*

Family CHELYDRIDÆ.

Cran. 531, 843, 847.	**Skel.** 49.	Chelydra serpentina, Linn. *Snapping Turtle.*

Family CINOSTERNIDÆ.

Cran. 666, 667, 668, 669.	**Skel.** 674.	Cinosternum pennsylvanicum pennsylvanicum, Bosc. *Mud Turtle.*

ORDER **Lacertilia.**

SUB-ORDER **PLEURODONTA.**

Family IGUANIDÆ: *Iguanas.*

Cran. 1004, 1005.	**Skel.** 684.	Holbrookia maculata maculata, Girard. *Prairie Lizard.*
Cran. 803.	**Skel.** 742.	Crotaphytus collaris, Say. *Ring-necked* or *Collared Lizard.*
Cran. 88, 89, 539, 546.	**Skel.** 86.	Sceloporus undulatus undulatus, Harlan. *Common Lizard; Brown Swift.*

Cran. 1540.	**Skel.**	Sceloporus consobrinus, Bd. and Girard. *Western Lizard.*
Cran. 1442.	**Skel.** 1104.	Sceloporus spinosus, Wiegmann. *Western Spring Lizard.*
Cran. 538.	**Skel.** 82.	Phrynosoma cornutum, Harlan. *Horned Lizard.*
Cran. 1443.	**Skel.** 1399.	Phrynosoma douglassii douglassii, Bell. *Douglass's Horned Lizard.*
Cran.	**Skel.** 1534.	Phrynosoma regale, Girard. *Regal Horned Lizard.*
Cran.	**Skel.** 1555.	Phrynosoma maccallii, Hallowell. *MacCall's Horned Lizard.*

Family HELODERMIDÆ.

Cran.	**Skel.** 166.	Heloderma suspectum, Cope. *Gila Monster.*

Family TEIDÆ.

Cran. 91, 92, 541, 1542, 1543.	**Skel.**	Cnemidophorus sex-lineatus, Linn. *Six-lined Lizard.*

Family SCINCIDÆ: *Skinks.*

Cran. 1103.	**Skel.** 962.	Eumeces obsoletus, Bd. and Gir. *Pale Lizard.*
Cran. 998, 999.	**Skel.**	Eumeces guttulatus, Hallowell. *Spotted Lizard* or *Skink.*
Cran. 876, 1216, 1271, 1272, 1273, 1274.	**Skel.** 1215.	Eumeces fasciatus, Linn. *Striped Lizard; Blue-tailed Skink.*

ORDER **Ophidia:** Serpents.

SUB-ORDER **ASINEA.**

Family COLUBRIDÆ: *Colubrine Serpents.*

Cran. 859.	**Skel.** 94.	Carphophiops amœnus, Say. *Red Snake.*
Cran.	**Skel.** 1020.	Tantilla nigriceps, Kenn.
Cran.	**Skel.** 1038.	Ophibolus doliatus doliatus, Linn.
Cran. 1091.	**Skel.**	Ophibolus doliatus gentilis (Linn.), Bd. and Grd.

Cran.	Skel. 701.	Ophibolus getulus getulus (Linn.), Bd. and Grd. *Thunder Snake; King Snake.*
Cran.	Skel. 994.	Ophibolus getulus boylii (Linn.), Bd. and Grd. *Boyle's Chain Snake.*
Cran. 1090.	Skel.	Ophibolus getulus, sayi, Holbrook. *Say's Chain Snake.*
Cran. 1414.	Skel. 706, 831.	Diadophis punctatus punctatus (Linn.), Bd. and Grd. *Ring-necked Snake.*
Cran.	Skel. 851.	Diadophis punctatus amabilis (Linn.), Bd. and Grd.
Cran. 548, 1231.	Skel. 590.	Cyclophis vernalis, De Kay. *Green Snake.*
Cran.	Skel. 743.	Coluber vulpinus, Bd. and Grd. *Fox Snake.*
Cran.	Skel. 1018.	Coluber obsoletus obsoletus (Say), Kenn. *Pilot Black Snake; Racer.*
Cran.	Skel. 1087.	Coluber obsoletus confinis (Say), Bd. and Grd.
Cran.	Skel. 1213.	Coluber guttatus, Linn. *Chicken Snake.*
Cran.	Skel. 1089.	Coluber emoryi. Bd. and Grd. *Emory's Snake.*
Cran. 1222.	Skel. 1221.	Pityophis sayi mexicanus, Dum. and Bib. *Gopher Snake.*
Cran. 980.	Skel. 1223, 1536.	Pityophis sayi bellona, Bd. and Grd. *Bull Snake.*
Cran.	Skel. 53.	Bascanium constrictor (Linn.), Bd. and Grd. *Black Snake.*
Cran.	Skel. 1530.	Bascanium tæniatum laterale, Hall.
Cran.	Skel. 1529.	Bascanium tæniatum tæniatum, Hall.
Cran. 702, 982.	Skel.	Bascanium flagelliforme testaceum (Say.), Bd. and Grd.
Cran.	Skel. 705.	Eutænia saurita (Linn.), Bd. and Girard. *Ribbon Snake.*
Cran. 995.	Skel. 1088.	Eutænia faireyi, Bd. and Gird. *Fairie's Garter Snake.*
Cran. 547, 1233.	Skel. 84.	Eutænia marciana, Bd. and Gird. *Marcy's Garter Snake.*

Cran. 1528.	Skel. 1527.	Eutænia vagrans vagrans, Bd. and Gird. *Common Western Garter Snake.*
Cran. 1318.	Skel. 85.	Eutænia sirtalis dorsalis, Bd. and Gird. *Eastern Garter Snake.*
Cran. 1533.	Skel. 1230.	Eutænia sirtalis ordinata (Linn.), Bd. and Gird.
Cran. 1228, 546.	Skel. 42, 1227.	Eutænia sirtalis sirtalis (Linn.), Bd. and Gird.
Cran.	Skel. 911.	Eutænia sirtalis parietalis (Linn.), Say.
Cran.	Skel. 1229.	Eutænia elegans, Bd. and Gird.
Cran. 629.	Skel. 830, 1558.	Tropidonotus sipedon sipedon (Linn.), Bd. and Gird. *Water Snake.*
Cran.	Skel. 858.	Tropidonotus grahamii, Bd. and Gird. *Graham's Water Snake.*
Cran.	Skel. 598.	Tropidonotus leberis (Linn.), Bd. and Gird. *Yellow-bellied Snake.*
Cran.	Skel. 1214.	Tropidonotus sipedon woodhouseii (Linn.), Bd. and Gird. *Woodhouse's Snake.*
Cran. 1226.	Skel. 768.	Heterodon simus nasicus, Bd. and Gird. *Hog-nosed Snake; Sand Viper.*
Cran.	Skel. 703, 1086.	Heterodon platyrhinus (Lata.), Bd. and Gird. *Western Sand Viper.*

SUB-ORDER **PROTEROGLYPHA.**

Family ELAPIDÆ: *Vipers.*

Cran. 1319.	Skel. 90.	Elaps fulvius fulvius (Linn.), Bd. and Gird. *Harlequin Snake.*

SUB-ORDER **SOLENOGLYPHA.**

Family CROTALIDÆ: *Rattlesnakes, etc.*

Cran. 545, 615.	Skel.	Crotalus horridus, Linn. *Banded Rattlesnake; Northern Rattlesnake.*
Cran.	Skel. 700.	Crotalus adamanteus adamanteus (Beauv.), Bd. and Gird. *Diamond Rattlesnake.*
Cran. 993.	Skel.	Crotalus adamanteus atrox (Beauv.), Bd. and Gird.
Cran.	Skel. 1003.	Ancistrodon contortrix, Bd. and Gird. *Copper-head; Moccasin.*

LIST OF CRANIA AND SKELETONS OF FOREIGN REPTILES.

CLASS **REPTILIA.**

ORDER **Ophidia.**

SUB-ORDER **ASINEA.**

Family BOIDÆ: *Boas.*

Cran. 541, 543, 544.	**Skel.**	Boa constrictor, Linn. *Boa.*

ORDER **Lacertilia.**

SUB-ORDER **PLEURODONTA.**

Family IGUANIDÆ: *Iguanas.*

Cran.	**Skel.** 44.	Metapocerus cornutus, Wagler. *South American Lizard.*
Cran.	**Skel.** 1444.	Iguana tuberculata, Wagler. *Banded Iguana.*

LIST OF CRANIA AND SKELETONS OF FISHES.

NOTE.—The classification adopted is that of Dr. Theodore Gill, in his paper "*Arrangement of the Families of Fishes*," Smithsonian Miscellaneous Collections, No. 247, 1872, and the nomenclature for marine forms is substantially in accordance with his "*Catalogue of the Fishes of the East Coast of North America*," Smithsonian Miscellaneous Collections, No. 283, 1873.

CLASS **PISCES.**

SUB-CLASS **Teleostei.**

ORDER **Plectognathi.**

SUB-ORDER **GYMNODONTES.**

Family TETRODONTIDÆ.

Cran.	**Skel.** 1413.	Chilichthys turgidus (Mitch.), Gill. *Rough Puffer; Porcupine Fish; Blower.*

ORDER **Pediculati.**

Family LOPHIIDÆ.

Cran. 1156, 1157.	**Skel.** 1164.	Lophius americanus, De Kay. *Goose Fish; Fishing Frog; Sea Devil.*

ORDER **Teleocephali.**

SUB-ORDER **HETEROSOMATA.**

Family PLEURONECTIDÆ.

Cran. 1153.	**Skel.** 13.	Pseudopleuronectes americanus (Walb.) Gill. *Common Flounder.*
Cran.	**Skel.** 107.	Chænopsetta occellaris (De Kay), Gill. *Long-toothed Flounder.*
Cran. 152.	**Skel.**	Hippoglossus americanus, Gill. *Halibut.*

SUB-ORDER **ANACANTHINI.**

Family GADIDÆ.

Cran. 553.	**Skel.** 111.	Gadus morrhua, Linn. *Common Codfish.*
Cran.	**Skel.** 616.	Microgadus tomcodus (Walb.), Gill. *Tom Cod; Frost Fish.*
Cran. 554.	**Skel.** 26.	Melanogrammus æglefinus (Linn.), Gill. *Haddock.*

Cran.	**Skel.** 626.	Brosmius americanus, Gill. *European Cusk; Polar Cod Fish.*

Family MERLUCIDÆ.

Cran.	**Skel.** 1114.	Merlucius bilinearis (Mitch.), Gill. *American Hake.*

Family CRYPTACANTHIDÆ.

Cran.	**Skel.** 81.	Cryptacanthodes maculatus, Storer. *Ghost Fish; Wry-mouth.*

SUB-ORDER **ACANTHOPTERI.**

Family LABRIDÆ.

Cran. 576.	**Skel.** 54.	Tautoga onitis (Linn.), Günther. *Black Fish; Tautog.*

Family SCARIDÆ.

Cran. 812, 846.	**Skel.**	Pseudocarus guacamaia (Cuv. and Val.), Günther, *Parrot Fish.*

Family SCOMBRIDÆ.

Cran. 1100.	**Skel.** 59.	Scomber scombrus, Linn. *Mackerel.*
Cran. 1169, 1170.	**Skel.** 1868.	Orcynus secundi-dorsalis (Storer), Gill. *Horse Mackerel; Tunny.*
Cran. 1092.	**Skel.** 790.	Cybium maculatum (Mitch.), Cuv. *Spanish Mackerel.*

Family CARANGIDÆ.

Cran.	**Skel.** 1211.	Trachynotus carolinus (Linn.), Gill. *Pompano; Crevallé.*

Family SCIÆNIDÆ.

Cran. 1190.	**Skel.** 1146.	Cynoscion carolinensis (Cuv. and Val.), Gill. *Salmon Trout; Spotted Sea Trout.*
Cran. 556.	**Skel.** 105, 110.	Cynoscion regalis (Bloch), Gill. *Squeteague; Weak Fish; Gray Trout.*
Cran. 120.	**Skel.** 1096.	Pogonias chromis, Lacep. *Drum.*
Cran. 878, 886, 887.	**Skel.** 877, 885.	Liostomus xanthurus, Lacep. *Yellow Tail; Spot.*
Cran. 559.	**Skel.** 142.	Sciænops ocellatus (Linn.), Gill. *Red Bass; Bass; Sea Bass; Red Fish; Ocellated Drum.*
Cran. 1149, 1151.	**Skel.** 1145, 1154.	Menticirrus nebulosus (Mitch.), Gill. *King Fish; Whiting.*

Cran.	Skel.	
1147.	1044.	Micropogon undulatus (Linn.), Cuv. and Val. *Croaker; Hick Fish.*

Family SPARIDÆ.

Cran.	Skel.	
574.	61.	Archosargus probatocephalus (Walb.), Gill. *Sheephead.*
1202, 1203, 1204.	1201, 1212.	Stenotomus argyrops (Linn.), Gill. *Scup; Porgy.*

Family SERRANIDÆ.

Cran.	Skel.	
575.	11.	Centropristes atrarius (Linn.). *Black Sea Bass.*

Family PERCIDÆ.

Cran.	Skel.	
568, 863.	24.	Perca flavescens (Mitch.). *Yellow Perch.*
Cran.	Skel. 148.	Stizostedion americanum, Girard. *Pike Perch.*
Cran.	Skel. 170.	Percina caprodes (Raf.), Girard. *Hog Fish.*
Cran.	Skel. 74.	Boleosoma fuciforme, Girard. *Darter.*

Family LABRACIDÆ.

Cran.	Skel.	
558.	23.	Morone americana (Gmelin), Gill. *White Perch.*
Cran. 43.	Skel. 3.	Roccus lineatus (Bl. Schu.), Gill. *Striped Bass; Rock Fish.*

Family CENTRARCHIDÆ.

Cran.	Skel.	
860, 865.	5.	Lepomis auritus, Gill. *Long-eared Sunfish.*
Cran.	Skel. 815.	Pomotis aureus, Gill. *Common Sunfish; Pumpkin-seed; Tobacco-box.*
Cran. 1150.	Skel. 817.	Enneacanthus obesus, Gill. *Mottled Sunfish.*
Cran.	Skel. 823.	Hyperistius carolinensis, Gill. *Black Spotted Sunfish.*
Cran.	Skel. 147.	Micropternus salmoides (Lac.), Gill. *Small-mouthed Black Bass; Black Bass.*
Cran.	Skel. 1142.	Micropterus floridanus (Les.), Gill. *Oswego Bass.*

Family EPHIPPIIDÆ.

Cran.	Skel.	
850.	68.	Parephippus gigas, Gill. *Moon Fish.*

Family Pomatomidæ.

Cran. 67, 555, 1158.	**Skel.** 63.	Pomatomus saltatrix (Linn.), Gill. *Mackerel; Skip-Jack.*

Family Echineididæ.

Cran.	**Skel.** 71.	Leptecheneis naucrateoides (Zuiew.), Gill. *Sucker.*

Sub-Order **PERCESOCES.**

Family Atherinidæ.

Cran. 882.	**Skel.**	Chirostoma notata (Mitch.), Gill. *Silver-sides.*

Sub-Order **SYNENTOGNATHI.**

Family Belonidæ.

Cran. 562.	**Skel.** 55.	Belone longirostris (Mitch.), Gill. *Silver Gar; Bill Fish.*

Family Scomberesocidæ.

Cran.	**Skel.** 1054.	Exocœtus exiliens, Gmelin. *Flying Fish.*

Sub-Order **HAPLOMI.**

Family Esocidæ.

Cran. 557.	**Skel.** 16.	Esox reticulatus, Lesueur. *Pickerel.*
Cran. 609.	**Skel.** 146.	Esox lucius, Linn. *Lake Pike; Mascalunge.*

Family Cyprinodontidæ.

Cran. 1133.	**Skel.** 880.	Fundulus heteroclitus (Linn.), Gill. *Mummichog.*
Cran.	**Skel.** 103.	Fundulus bairdii, Agass. *Baird's Stone-tugger.*
Cran.	**Skel.** 881.	Hydrargyra majalis (Walb.), Val. *Mummichog.*

Sub-Order **ISOSPONDYLI.**

Family Microstomidæ.

Cran.	**Skel.** 1064.	Osmerus mordax (Mitch.), Gill. *Smelt.*

Family Salmonidæ.

Cran. 571.	**Skel.** 58.	Salmo fontinalis, Mitch. *Brook Trout.*
Cran. 1288.	**Skel.** 144.	Salmo confinis, De Kay. *Lake Trout.*
Cran.	**Skel.** 131.	Coregonus albus, Les. *White Fish.*

Family ELOPIDÆ.

Cran.	**Skel.** 1140.	Megalops thrissoides (Bl. Sch.), Günther. *Jew Fish; Tarpum.*

Family CLUPEIDÆ.

Cran. 570.	**Skel.** 36.	Alosa sapidissima (Wilson), Storer. *Shad.*
Cran. 1070, 1071, 1072, 1073.	**Skel.** 1078.	Pomolobus pseudoharengus (Wilson), Gill. *Herring; Alewife.*

Family DOROSOMIDÆ.

Cran. 567.	**Skel.** 108.	Dorosoma cepediana (Lac.), Gill. *Toothed Herring.*

SUB-ORDER **EVENTOGNATHI.**

Family CATOSTOMIDÆ.

Cran. 572.	**Skel.** 57.	Hylomyzon nigricans, Agassiz. *Black Sucker.*
Cran. 662, 663, 664, 665.	**Skel.** 659.	Catostomus teres, Lesueur. *Chub; Sucker.*
Cran. 807.	**Skel.** 806.	Moxostoma oblonga, Agassiz. *Horned Sucker.*

Family CYPRINIDÆ.

Cran. 569.	**Skel.** 28, 630.	Carassius auratus, Bleaker. *Goldfish.*
Cran. 573.	**Skel.**	Semotilus pulchellus, Gill. *Chub.*
Cran. 866.	**Skel.** 585.	Semotilus rhotheus, Cope. *Fall Fish; Swamp Carp.*
Cran. 560.	**Skel.** 75.	Hybognathus regius, Girard. *Gudgeon; River Smelt.*
Cran. 864.	**Skel.** 168.	Hypsilepis cornutus, Mitch. *Red-fin.*
Cran.	**Skel.** 879.	Hybopsis hudsonius, Clinton.
Cran. 588.	**Skel.** 592.	Ceratichthys biguttatus, Kirtland. *Horned Chub.*
Cran.	**Skel.** 599.	Stilbe americana, Linn. *Minnow; Shiner.*

Cran.	**Skel.** 73.	Luxilus kentuckiensis, Gill. *Gold-striped Dace.*
Cran.	**Skel.** 587.	Exoglossum maxillingua, Lesueur. *Tonguejaw.*

ORDER **Nematognathi.**

Family SILURIDÆ.

Cran. 563, 564.	**Skel.** 21.	Amiurus nigricans, Lesueur. *Lake Catfish; Black Catfish.*
Cran.	**Skel.** 51.	Rhamdia brachypterus (Cope), Gill. *Mexican Catfish.*
Cran.	**Skel.** 1143.	Amiurus atrarius, DeKay. *Black Catfish.*

ORDER **Apodes.**

SUB-ORDER **ENCHELYCEPHALI.**

Family ANGUILLIDÆ.

Cran. 1094, 1095.	**Skel.** 25, 1105.	Anguilla bostoniensis (Les.), DeKay. *Common Eel.*

SUB-CLASS Ganoidei.

SUPER-ORDER **HYOGANOIDEI.**

ORDER **Rhomboganoidei.**

Family LEPIDOSTEIDÆ.

Cran. 565, 566.	**Skel.** 62.	Lepidosteus osseus, Lac. *Common Gar Fish.*

SUPER-ORDER **CHONDROGANOIDÆ.**

ORDER **Chondrostei.**

Family ACIPENSERIDÆ.

Cran. 1152.	**Skel.** 971.	Acipenser oxyrhynchus, Mitch. *Sharp-nosed Sturgeon.*

SUB-CLASS Elasmobranchii.

SUPER-ORDER **PLAGIOSTOMI.**

ORDER **Raiæ.**

SUB-ORDER **MASTICURA.**

Family TRYGONIDÆ.

Cran. 1174.	**Skel.** 1165.	Trygon centrura (Mitch.), Gill. *Sting Ray; Stingaree*

Sub-Order **PACHYURA.**

Family Raiaidæ.

Cran.	**Skel.** 874.	Raia undulata, Lacep. *Whip-tailed Ray.*
Cran.	**Skel.** 1159.	Raia lævis, Mitch. *Sharp-nosed Skate.*

Family Pristidæ.

Cran. 1015, 1063, 1135.	**Skel.**	Pristis antiquorum (Linn.), Lath. *Saw Fish.*

Order **Squali.**

Sub-Order **GALEI.**

Family Odontaspididæ.

Cran. 1171.	**Skel.** 1166.	Eugomphodus littoralis, Gill. *Sand Shark; Shovel-nose.*

Family Galeorhinidæ.

Cran. 673, 1269.	**Skel.**	Eulamia milbertii (Müll. and Henle), Gill. *Blue Shark.*
Cran. 1172, 1262.	**Skel.**	Eulamia obscurus (Lesueur), Gill. *Dusky Shark.*
Cran. 1052.	**Skel.**	Galeocerdo tigrinus, Müll. and Henle. *Tiger Shark.*
Cran. 1167.	**Skel.**	Mustela canis (Mitch.), DeKay. *Smooth Dogfish.*

Family Spinacidæ.

Cran.	**Skel.** 1155.	Squalus americanus (Storer), Gill. *Dogfish; Dog Shark.*