

PRACTICAL ENTOMOLOGY.

PAPER V.—CLASSIFICATION OF INSECTS.

LOWER SERIES—Body usually flattened; prothorax large and squarish; mouth parts usually adapted for biting; metamorphosis often incomplete, pupa often active; larva flattened, often resembling the adult—*Thysanura Neuroptera, Orthoptera, Hemiptera, Coleoptera*.

HIGHER SERIES—Body usually cylindrical; prothorax small; mouth parts formed for sucking; larva usually cylindrical, very unlike the adult—*Diptera, Lepidoptera, Hymenoptera*.

LOWER SERIES		
Wingless. No Metamorphic changes.	THYSANURA	{ Lepismatidæ—Bristle-tails Poduridæ—Spring-tails. Libellula—Darning needles
	NEUROPTERA	{ Ephemera—May Flies Phryganea—Caddis Flies Corydalus—horned great mandibles Termes—White Ants Gryllus—Crickets Locusta—Locusts
Non-suctorial. 4 wings Large equal wings; transparent.	ORTHOPTERA	{ Acrydium—Grasshoppers Phasma—Walking-ticks Blatta—Cockroaches Cimex—Bed bug Pediculus—Louse Coreus—Squash bug
Front pair slightly thickened narrow end overlapping; hind pair broad and folded.	HEMIPTERA	{ Notanecta—Water boatman Gicada—17 year locust Coccus—Cochineal Aphis—Plant louse Cicindela—Tiger beetles Carabus—Ground “ Dytiscus—Diving “ Silpha—Carion “ Scarabæidæ—Goliath beetle Elater—Snapping “ Pyrophorus—Lightening bug Coccinella—Lady bugs Cyrambycidæ—Long-horned beetle
Wingless and 4-winged. Suctorial. Legs slender.	COLEOPTERA	{ Curculionidæ—Weevils Culex—Mosquito Cecidomyia—Hessian Flies Tipula—Daddy-long-legs Pulex—Fleas Musca—House flies Cestrus—Bot flies Papilio—Butterflies Sphingidæ—Hawk Moths Noctua—Moths Apis—Bees Vespidæ—Wasps Formicidæ—Ants Cynipidæ—Gall-flies Tenthredinidæ—Saw-flies Uroceridæ—Horn-tail
Non-suctorial. Front wings horny, closing with a sharp edge.		
HIGHER SERIES		
Both suctorial and chewing.	Two-winged. DIPTERA	
	LEPIDOPTERA	
Four wings large and scaly. Legs not or active locomotion. Spiral proboscis or suction.	HYMENOPTERA	
Four wings, transparent. Mouth for sucking or biting.		