



PART 3

OBJECTS
FOR THE
MICROSCOPE

*all prepared
20/20 1925*

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LONDON

36th EDITION

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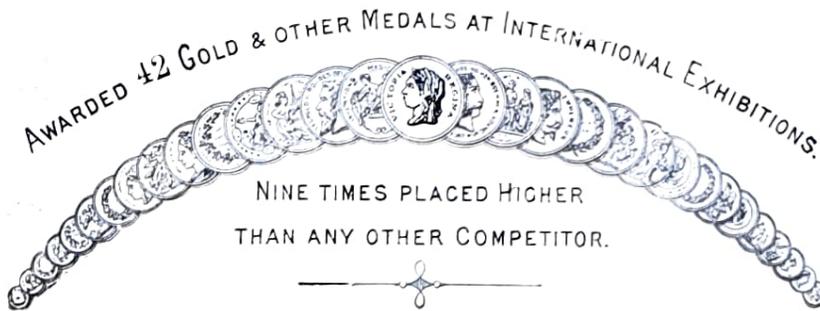
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Since the last Edition, this Catalogue has been thoroughly revised, and is more than ever representative of microscopic preparations of the most diverse character, forming one of the finest and most comprehensive collections in the world.

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BOTANY

(continued).

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Burr Reed, *Sparganium ramosum*
 Butcher's Broom, *Ruscus aculeatus*
 Cane, Sugar, *Saccharum officinarum*
 .. Wanghae and Malacca
 .. Rattan and Bamboo
 China Grass, *Boehmeria nivea*
 Date Palm, *Phoenix dactylifera*
 Dracena, *Cordyline rubra*
 Elodea, L.S. Apex, Aquatic
 Land Rush, *Juncus communis*
 .. Rhizome of *J. lamprocarpus*
 Maize, *Zea Mais*
 Long Sect.
 Orchid, *Odontoglossum halii*
 Long Sect.
 Potamogeton, T.S. Aquatic
 Reed (common), *Phragmites communis*
 Wheat, *Triticum*
 White Water Lily, *Nymphaea alba*

DICOTYLEDONS.

Alder, *Alnus glutinosa*
 Apple, *Pyrus communis*
 Aristolochia trophodra. *A. gigas*
 Ash, *Fraxinus excelsior*
 Beech, *Fagus sylvatica*
 Berberry, *Berberis vulgaris*
 Birch, *Betula alba*
 Bramble, *Rubus fruticosus*
 Bryony, *Bryonia dioica*, Trans. Sect.
 Long Sect.
 Burdock, *Arctium lappa*
 Chestnut (Spanish), *Castanea vulgaris*
 Chestnut (Horse), *Aesculus hippocastanum*
 Clematis *vitalba*
 Cork Tree, *Quercus suber*
 Currant (Black), *Ribes nigrum*
 Dodder on Clover, Long Sect. of Parasite, Trans. Sect. of Host, **2s. 0d.**
 Dog Rose, *Rosa canina*. Sec. through Spine
 Elder, *Sambucus nigra*
 Elm, *Ulmus campestris*
 Grape Vine, *Vitis vinifera*
 Gum Tree (red), *Eucalyptus calophylla*
 Gum Tree (blue), *Eucalyptus globulus*
 Holly, *Ilex aquifolium*
 India-rubber, *Ficus elastica*
 Lime Tree, *Tilia grandiflora*
 Lime Tree, Long. Tangential Section
 .. Long. Radial Section
 Maple, *Acer campestris*
 Marestalk, *Hippuris vulgaris*
 Mistletoe, *Viscum album*
 Oak (Evergreen), *Quercus ilex*
 .. British (Forest), *Q. pendunculata*

Dicotyledons—Continued.

Pepper Plant, *Piper nigrum*
 Pear Tree, *Pyrus domestica*
 Plane Tree, *Plantatus occidentalis*
 Poplar, *Populus nigra*
 Sarsaparilla, *Smilax officinalis*
 Sedge, *Carex pendula*
 Sunflower, *Helianthus tuberosa*, L.S.
 T.S.
 Sycamore, *Acer pseudo-platanus*
 Tea Plant, *Thea chinensis*
Type Slide
 Trans. Sect. Stems of Monocotyledon, Dicotyledon and Pteridophyte, 3 sections on 1 slide, **2s. 6d.**

GYMNOSPERMS.

Cedar of Lebanon, *Cedrus libanus*
 .. Himalaya, *Cedrus deodara*
 Chili Pine, *Araucaria imbricata*
 Pine (Scotch Fir), *Pinus sylvestris*
 .. (Canadian), *Pinus strobus*
Pinus sylvestris, showing 1, 2 and 3 years' growth on one slide, **2s. 6d.**
Pinus sylvestris, Trans. Sect.
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 Yew, *Taxus baccata*

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- 5 Arboreal Monocotyledon, *Dracena*
- 6 Herbaceous Monocotyledon, Maize
- 7 Bamboo Cane
- 8 *Cycas revoluta*
- 9 *Equisetum hiemale*
- 10 Moss, *Polytrichum*
- 11 Club Moss, *Lycopodium clavatum*
- 12 Male Fern, *Aspidium*
- 13 Clematis
- 14 Selaginella
- 15 *Pinus sylvestris*
- 16 Tree Fern, *Dicksonia*

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Marestalk, *Hippuris*
Equisetum
 Canadian Pond Weed, *Elodea*
 Scotch Fir, *Pinus sylvestris*
 Sunflower, *Helianthus*

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DESIGN. EFFICIENCY.



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BOTANY

(continued).

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LEAVES.—Transverse sections unless otherwise stated

MONOCOTYLEDONS.

- Aloe ferox, fleshy leaf of Xerophyte.
- Burr Reed, Sparganium ramosum
- Marram Grass, Psamma arenaria
- Esparto Grass
- Pampas Grass
- Floating Leaf of Water Lily, showing Idoblasts
- Maize, Zea mais
- Nerium oleander, showing stomata
- Orchid
- Yucca gloriosa

DICOTYLEDONS.

- Epidermis of box leaf showing stomata
- Defoliation : Stem and Petiole of Virginia Creeper
- Elm, Ulmus
- Heather, Calluna vulgaris
- Hemp, showing bast fibres
- Hakea, centric type
- Holly, Ilex aquifolium
- India Rubber, Ficus elastica
- Laurel, T.S., showing mesophyll
- Lime Tree, Tilia grandiflora
- Mistletoe, Viscum album
- Oak, Quercus suber
- Orange Tree, Cystoliths *in situ*
- Submerged leaf of Salvinia
- " " Ranunculus aquatilis
- Sunflower, Helianthus
- Tea Tree, Thea chinensis
- Tobacco Plant, Nicotiana tabacum

GYMNOSPERMS.

- Cycad, Cycas revoluta
- Pine (Scotch Fir) Pinus sylvestris

LEAF BUDS.

- Ash, Fraxinus, Trans. Sect.
- Elm, Ulmus, Trans. Sect.
- Horse Chestnut, Æsculus, Trans. Sect.
- Sycamore, Acer, Trans. Sect.
- Syringa, Lilac, Long Sect.
- Lime Tree, Tilia, L.S.
- Veronica, Trans. Sect.
- Water Lily, Nymphaea, Trans. Sect.
- Willow, Salix, Trans. Sect.

ROOTS.—Transverse Sections.

MONOCOTYLEDONS.

- Duckweed. Aquatic root with sheath
- Iris germanica. T.S.
- Maize. Zea mais. L.S. or T.S.
- Orchid. Aerial root, L.S. or T.S. showing Velamen
- Oat. Avena sativa. L.S. or T.S.
- Water Lily. Aquatic root showing air spaces

DICOTYLEDONS.

- Bean, Vicia faba. L.S. or T.S.
- Elder. Sambucus nigra. T.S.
- Elm, Ullmus campestris. T.S.
- " " " L.S.
- Helianthus tuberosa. Sunflower. L.S.
- " " " T.S.
- showing root branch "
- Lime. Tilia europæa
- Maple. Acer campestris. T.S.
- Pisum. Pea. T.S.
- " " L.S. showing root cap
- Quercus suber. Oak. T.S.
- Scorzonera, L.S. showing Latex vessels
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- Water Crowfoot, Ranunculus aquatilis

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Burr Reed, *Sparganium ramosum*
 Butcher's Broom, *Ruscus aculeatus*
 Cane, Sugar, *Saccharum officinarum*
 " Wanghae and Malacca
 " Rattan and Bamboo
 China Grass, *Boehmeria nivea*
 Date Palm, *Phoenix dactylifera*
 Dracæna, *Cordyline rubra*
 Elodea, L.S. Apex, Aquatic
 Land Rush, *Juncus communis*
 " Rhizome of *J. lamprocarpus*
 Maize, *Zea Mais*
 " " " Long Sect.
 Orchid, *Odontoglossum halii*
 " " " Long Sect.
 Potamogeton, T.S. Aquatic
 Reed (common), *Phragmites communis*
 Wheat, *Triticum*
 White Water Lily, *Nymphaea alba*

DICOTYLEDONS.

Alder, *Alnus glutinosa*
 Apple, *Pyrus communis*
 Aristolochia trophodra, *A. gigas*
 Ash, *Fraxinus excelsior*
 Beech, *Fagus sylvatica*
 Berberry, *Berberis vulgaris*
 Birch, *Betula alba*
 Bramble, *Rubus fruticosus*
 Bryony, *Bryonia dioica*, Trans. Sect.
 " " " Long Sect.
 Burdock, *Arctium lappa*
 Chestnut (Spanish), *Castanea vulgaris*
 Chestnut (Horse), *Aesculus hippocastanum*
 Clematis vitalba
 Cork Tree, *Quercus suber*
 Currant (Black), *Ribes nigrum*
 Dodder on Clover, Long Sect. of Parasite, Trans. Sect. of Host, **2s. 0d.**
 Dog Rose, *Rosa canina*. Sec. through Spine
 Elder, *Sambucus nigra*
 Elm, *Ulmus campestris*
 Grape Vine, *Vitis vinifera*
 Gum Tree (red), *Eucalyptus calophylla*
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 Holly, *Ilex aquifolium*
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 " British (Forest), *Q. pendunculata*

Dicotyledons—Continued.

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 Pear Tree, *Pyrus domestica*
 Plane Tree, *Plantatus occidentalis*
 Poplar, *Populus nigra*
 Sarsaparilla, *Smilax officinalis*
 Sedge, *Carex pendula*
 Sunflower, *Helianthus tuberosa*, L.S.
 " " " T.S.
 Sycamore, *Acer pseudo-platanus*
 Tea Plant, *Thea chinensis*
Type Slide
 Trans. Sect. Stems of Monocotyledon,
 Dicotyledon and Pteridophyte, 3
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GYMNOSPERMS.

Cedar of Lebanon, *Cedrus libanus*
 " Himalaya, *Cedrus deodara*
 Chili Pine, *Araucaria imbricata*
 Pine (Scotch Fir), *Pinus sylvestris*
 " (Canadian), *Pinus strobus*
Pinus sylvestris, showing 1, 2 and 3
 years' growth on one slide, **2s. 6d.**
Pinus sylvestris, Trans. Sect.
 " " Long sect.
 Yew, *Taxus baccata*

SERIES 31.

**Set of 16 Typical Stems, Trans. Sects.,
 specially selected, £1 6s. 0d.**

- 1 Aquatic Dicotyledon, *Hippuris*
- 2 Arboreal Dicotyledon, Elm
- 3 Herbaceous Dicotyledon, *Helianthus*
- 4 Aquatic Monocotyledon, *Sparganium*
- 5 Arboreal Monocotyledon, *Dracæna*
- 6 Herbaceous Monocotyledon, Maize
- 7 Bamboo Cane
- 8 *Cycas revoluta*
- 9 *Equisetum hiemale*
- 10 Moss, *Polytrichum*
- 11 Club Moss, *Lycopodium clavatum*
- 12 Male Fern, *Aspidium*
- 13 Clematis
- 14 Selaginella
- 15 *Pinus sylvestris*
- 16 Tree Fern, *Dicksonia*

GROWING POINT OF STEMS OF :

Marestalk, *Hippuris*
Equisetum
 Canadian Pond Weed, *Elodea*
 Scotch Fir, *Pinus sylvestris*
 Sunflower, *Helianthus*

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BOTANY

(continued).

1s. 6d. each unless otherwise marked.

LEAVES.—Transverse sections unless otherwise stated

MONOCOTYLEDONS.

- Aloe *ferox*, fleshy leaf of Xerophyte.
- Burr Reed, *Sparganium ramosum*
- Marram Grass, *Psamma arenaria*
- Esparto Grass
- Pampas Grass
- Floating Leaf of Water Lily, showing Idioblasts
- Maize, *Zea mais*
- Nerium oleander, showing stomata
- Orchid
- Yucca gloriosa*

DICOTYLEDONS.

- Epidermis of box leaf showing stomata
- Defoliation: Stem and Petiole of Virginia Creeper
- Elm, *Ulmus*
- Heather, *Calluna vulgaris*
- Hemp, showing bast fibres
- Hakea, centric type
- Holly, *Ilex aquifolium*
- India Rubber, *Ficus elastica*
- Laurel, T.S., showing mesophyll
- Lime Tree, *Tilia grandiflora*
- Mistletoe, *Viscum album*
- Oak, *Quercus suber*
- Orange Tree, *Cystoliths in situ*
- Submerged leaf of *Salvinia*
- " " *Ranunculus aquatilis*
- Sunflower, *Helianthus*
- Tea Tree, *Thea chinensis*
- Tobacco Plant, *Nicotiana tabacum*

GYMNOSPERMS.

- Cycad, *Cycas revoluta*
- Pine (Scotch Fir) *Pinus sylvestris*

LEAF BUDS.

- Ash, *Fraxinus*, Trans. Sect.
- Elm, *Ulmus*, Trans. Sect.
- Horse Chestnut, *Æsculus*, Trans. Sect.
- Sycamore, *Acer*, Trans. Sect.
- Syringa, Lilac, Long Sect.
- Lime Tree, *Tilia*, L.S.
- Veronica, Trans. Sect.
- Water Lily, *Nymphœa*, Trans. Sect.
- Willow, *Salix*, Trans. Sect.

ROOTS.—Transverse Sections.

MONOCOTYLEDONS.

- Duckweed. Aquatic root with sheath
- Iris germanica*. T.S.
- Maize. *Zea mais*. L.S. or T.S.
- Orchid. Aerial root, L.S. or T.S. showing Velamen
- Oat. *Avena sativa*. L.S. or T.S.
- Water Lily. Aquatic root showing air spaces

DICOTYLEDONS.

- Bean, *Vicia faba*. L.S. or T.S.
- Elder. *Sambucus nigra*. T.S.
- Elm, *Ulmus campestris*. T.S.
- " " " L.S.
- Helianthus tuberosa*. Sunflower. L.S.
- " " " T.S.
- showing root branch " "
- Lime. *Tilia europœa*
- Maple. *Acer campestris*. T.S.
- Pisum*. Pea. T.S.
- " " L.S. showing root cap
- Quercus suber*. Oak. T.S.
- Scorzonera*, L.S. showing Latex vessels
- Taraxacum*, Dandelion, showing reticulated vessels
- Wallflower. *Cheiranthus cheiri*
- Water Crowfoot, *Ranunculus aquatilis*

OVARIES.

- Capsella*, L.S. Embryo
- Lilium*, T.S. Ovary, Embryosac, 2s. 6d.
- " T.S. Ovary, with archisporal cell, 2s. 6d.
- " T.S. Ovary, division of embryosac 4 nuclei stage, 2s. 6d.
- Axile Placentation, *Begonia*
- Gymnospermous Ovule, Yew
- Male Inflorescence of Yew
- One-celled, Orchis
- Two-celled, Potato
- Three-celled, Tulip
- Parietal placentation, Poppy

POLLENS, FLOWER BUDS, ETC.

- Pollen of:—
- Convolvulus*, *Geranium*, Hollyhock, Lily, Mallow, *Pinus sylvestris*, Anemone, Evening Primrose, Clematis, Rose, Passion Flower, *Nasturtium*, *Antirrhinum*, Maize
- Pollen *in situ* on stigma of *Oenothera*, 2s. 6d.
- Betula alba*, Birch, Catkin L.S., ♀ and ♂, 2s. 6d.
- Caltha*, Trans. and Long. Sect. Flower 2s. 6d.
- Lily, T.S. of flower bud
- Buttercup, T.S. and L.S. on one slide, 2s. 6d.
- Dandelion, T.S. Capitulum, 1s. 9d.
- " T.S. and L.S. Capitulum, 2s. 6d.
- Wheat Flower, *Triticum*, entire, a typical grass, 1s. 9d.

SEEDS.

- Oat, *Avena sativa*, Long. Sec. embryo
- Maize, *Zea mais*, " " "
- Wheat, *Triticum*, " " "
- Rice Grain, *Oryza sativa*, T.S.
- Pepper Corn, *Piper nigrum*, T.S.
- Acorn, *Quercus*, T.S.
- Clove, *Eugenia caryophyllata*, T.S.
- Stone of Date, Trans. Sect.
- Castor Oil, *Recinus*, Trans. Sect.
- Ficus*, V.S. *Hypanthodium*

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(continued).

ROOTS.—Transverse Sections.

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FUNGI—EUMYCETES.

1s. 9d. each.

ZYCOMYCETES.—

- Mucor Mucedo, Vegetable mould, showing mycelium and sporangia
Rhizopus nigricans
Empusa Muscae, Fungus on House Fly

OOMYCETES.—

- Cystopus candidus, white rust on cabbage, showing conidiospores
Plasmodiophora brassicae, in root of cabbage
Peronospora infestans, on Potato leaf

ASCOMYCETES.—

- Eurotium (*Aspergillus glaucus*), Blue mould on cheese, showing mycelium and conidiospores
Penicillium glaucum, Vegetable mould, showing mycelium and conidiospores
Erysiphe
Truffle, Tuber
Peziza with Asci and Paraphyses
Claviceps purpurea, Ergot of Rye, stroma with Perithecia
Saccharomyces cerevisiae, Yeast
Sphaerotheca mors-uvae, American Gooseberry mildew, perithecium
Sphaerotheca mors-uvae conidial stage
Dasyscypha willkommii, Larch-canker
L.S. apothecium penetrating bark of Larix

BASIDIOMYCETES.—

- Ustilago segetum, Smut in Grain of Wheat
Ustilago maydis, Smut in Indian Maize
Uredo foetida, Bunt in Corn
Æcidium berberidis, Leaf of Berberry
Puccinia graminis, Mildew in Corn
" showing teleutospores
" showing uredospores
Lycoperdon saccatum, Puff Ball
Agaricus campestris, Mushroom, Section of Gills
Lupinus polyphyllus, section of nodule with bacteria *in situ*

MARINE ALGÆ. PHAEOPHYCÆ.

- Ectocarpus siliquosus showing developing sporangia
Ectocarpus umlocua, sporangia
Fucus serratus—Male Conceptacle with antheridia
Antheridia teased out
Female Conceptacle with oogonia
Fucus Vesiculosus—Male Conceptacle with antheridia
Female Conceptacle with oogonia
Laminaria digitata T.S. of Leaf
T.S. of Stripe
L.S. "
Callithamnion : Tetraspores
Plumaria elegans

Marine Algæ. Phaeophycæ—

Continued.

- Dasya coccinea, Sporangia
Bonnemaisonia aspargoides
Polysiphonia fastigiata
Ptilota plumosa, showing procarpia

FRESH WATER ALGÆ.

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- Chamydomonas
Volvox globator with resting spores, 1s. 9d.
Protococcus viridis
Pandorina morum
Oedogonium : Oogonium *in situ*
Vaucheria showing Antheridia and Oogonia
Batrachospermum moniliforme
Chaetophora
Draparnaldia plumosa
Hydrodictyon
Nostoc commune
Prasiola Crispa

CONJUGATÆ.—

- Cosmarium, Desmid
Closterium "
Micrasterias "
Spirogyra nitida in conjugation
" " vegetative plant

CHAROPHYTA.

- Chara aspera, Fertile spike, 1s. 9d.
" " L.S. Developing antheridia and archegonia, 1s. 9d.
" " L.S. Stem Apex, 1s. 9d.
Nitella, L.S. Stem Apex, 1s. 9d.
" Entire, showing antheridia and archegonia, 1s. 9d.
" L.S. Developing antheridia and archegonia, 1s. 9d.

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- Collema. V.S. Thallus with Apothecia, 1s. 9d.
Parmelia. " " " " 1s. 9d.
Ramalina. " " " " 1s. 9d.
Physcia parietina " " " " 1s. 9d.

HEPATICACÆ.

1s. 9d. each.

MARCHANTIACÆ.—

- Antheridia, Marchantia polymorpha
Archegonia " "
Section of Thallus " "
Section through Gemmæ Cup, with Gemmæ *in situ*

JUNGERMANNIÆ.—

- Pellia epiphylla. Vert. Sect. Thallus, showing developing sporogonium
Pellia. V.S. Thallus :—Antheridia
Pellia. V.S. Thallus :—Archegonia

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MUSCI, MOSSES.

- Mnium, Archegonium, Long Sect., 1s. 9d.
- Mnium, Antheridium, Long Sect., 1s. 9d.
- Leaf of Mnium, Chlorophyll
- Polytrichum, L.S. of Capsule, 1s. 9d.
- Polytrichum, T.S. of Stem
 - „ Long Sect. Antheridium, 1s. 9d.
 - „ Long Sect. Archegonium, 1s. 9d.
- Lycopodium clavatum, Stem of Club Moss
- „ „ Spores of „ „
- Funaria hygrometrica, capsule. Long Sect., 1s. 9d.
- Funaria. Antheridium. Long Sect., 1s. 9d.
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- Sphagnum. Leaf.
- Schistostega osmundacea, whole plant.

PTERIDOPHYTA—FERNS.

- Adiantum cuneatum :—
 - Fructification on Fronds
 - Prothallus showing antheridia, entire
- Pteris aquilina :—Spores
 - Rachis. T.S.
 - „ L.S.
 - Rhizome. T.S.
 - „ L.S.
- Asplenium exulentus. T.S. Rachis
- Isolated scalariform vessels from rachis of fern
- Lastrea filix mas :—T.S. Root
 - „ „ „ T.S. Rachis
 - „ „ „ L.S. „
 - „ „ „ T.S. Sorus 1s. 9d.
- Osmunda regalis, T.S. Stem
- Woodwardia radicans, Tree Fern. T.S. Stem
- Dicksonia :—Tree Fern. T.S. Stem showing sclerenchyma
- Scolopendrium vulgare :—
 - Harts Tongue Fern. T.S. Stem and Leaf

JUNGERMANNIÆ.

- EQUISETACEÆ.**—Strobilus of *E. hiemale*, Trans. Sect. 1s. 9d.
- Strobilus, L.S. 1s. 9d.
- E. hiemale*. T.S. Stem
- Long Section of Stem Apex
- MARSILEACEÆ.**—Microspores and Macrospores in Sporocarp of *Pilularia*, 1s. 9d.
- LYCOPODIACEÆ.**—
 - Selaginella, Fertile Spike, showing Micro and Megaspores, 1s. 9d.
 - Selaginella, Leafy Stem
 - Selaginella *Kraussiana*, Section of Stem

CYCADALES.

- Cycas revoluta*, T.S. Stem
- „ „ T.S. Leaf

CONIFERÆ.

- Scotch Pine, *Pinus Sylvestris*—
 - Old Stem, Long Sect., showing medullary rays
 - Old Stem, Trans. Sect.
 - Young Stem, Trans. Sect.
 - Stem Apex, showing growing point
 - R.L.S. old wood, showing bordered pits
 - Root, Trans. Sect.
 - Root, Long Sect.
 - Stem, Trans. Sects., showing one, two and three years' growth on one slide, 2s. 6d.
 - Leaf, Trans. Sect.,
 - Staminate Strobilus, Long Sect., 1s. 9d.
 - Ovulate Strobilus, Long Sect., 1s. 9d.
 - Ovule, Long Sect., 1s. 9d.
 - Pollen Grains
- Yew, *Taxus Baccata*—
 - Stem, Trans. Sect.
 - Stem, Long Sect.
 - Root, Trans. Sect.
 - Leaf, Trans. Sect.
 - Ovule, Long Sect., 1s. 9d.
- Picea Excelsa*. Spruce fir, Trans. Sect.
 - Stem, showing resin ducts
- Araucaria*, Monkey puzzle, epidermis of leaf, showing stomata

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In case complete, £2 0s. 0d.

- | | |
|---|---|
| <ol style="list-style-type: none"> 1 Annular vessels—Balsam 2 Bast fibres in cross section—Hemp 3 Cambium layer in Grape Vine 4 Chlorophyll in leaf of moss—Mnium 5 Cork Cambium in Quercus suber 6 Cylindrical cells—Helianthus 7 Cystoliths—Ficus elastica 8 Digestive glands—Nepenthes 9 Dotted vessels—Helianthus 10 Epidermis-stomata—Box 11 Lactiferous vessels—Scorzonera 12 Oil cavities—Lemon 13 Resin vessels—Spruce Fir | <ol style="list-style-type: none"> 14 Reticulated cells—Taraxacum 15 Scalariform vessels—Fern 16 Sieve tubes, L.S.—Curcubita 17 Sieve plates, T.S.—Curcubita 18 Spiral vessels—Rhubarb 19 Starch grains <i>in situ</i>—Potato 20 Stellate pith—Rush 21 Stinging hairs—Nettle 22 Raphides—Onion 23 Vegetable cells—cell wall and nucleated protoplasm—Maize 24 Woody cells with bordered pits—Pinus |
|---|---|

SERIES 35.—24 SLIDES (COMPARATIVE ANATOMY).

In case complete, £2 1s. 6d.

- | | |
|--|---|
| <ol style="list-style-type: none"> 1 Anther sac with pollen, <i>in situ</i> 2 Antheridia of Moss, 1s. 9d. 3 Archegonia of Moss, 1s. 9d. 4 Bud of Lily, section, showing ovary, anthers, petals, pollen grains, etc., <i>in situ</i> 5 Capsule of Moss—Polytrichum, 1s. 9d. 6 Conjugation—Spirogyra 7 Desmid, Micrasterias 8 Fertile branch of Chara, 1s. 9d. 9 Leaf, vert. sec., showing stomata 10 Microspores and Macrospores in Sporocarp of Pilularia, 1s. 9d. 11 Pollen <i>in situ</i> on stigma 12 Protococcus viridis 13 Root, L.S., showing root cap 14 „ T.S., showing branch | <ol style="list-style-type: none"> 15 Section of angiospermous ovary 16 Sorus of Fern, vert. section, 1s. 9d. 17 Stem of Aquatic Dicotyledon—Mares tail 18 Stem of Monocotyledon, Maize Trans. Sect. 19 Stems (T.S.) of Monocotyledon, Dicotyledon, and Pteridophyte, mounted on one slide 2s. 6d. 20 Stem of Lycopodium clavatum 21 Stem of Pinus sylvestris, 1, 2, and 3 years' growth, mounted on one slide 2s. 6d. 22 Stem of Selaginella 23 Wheat grain and embryo, Long. Sect. 24 Yeast |
|--|---|

SERIES 36—24 SLIDES.

This set has been arranged to cover the Intermediate B.Sc. Course as approved by the University of London. In Polished Oak Case, £2 1s. 0d.

- | | |
|---|---|
| <ol style="list-style-type: none"> 1 Chlamydomonas 2 Pleurococcus viridis 3 Spirogyra nitida 4 Oedogonium 5 Vaucheria 6 Fucus serratus. Male Conceptacle 7 „ „ Female „ 8 Saccharomyces cerviseæ 9 Peronospora infestans, 1s. 9d. 10 Mucor mucedo, 1s. 9d. 11 Eurotium, 1s. 9d. 12 Agaricus campestris, Gill Sect. 13 Bacillus subtilis, 2s. 6d. | <ol style="list-style-type: none"> 14 Micrococcus prodigiosus, 2s. 6d. 15 Funaria. L.S. Capsule, 1s. 9d. 16 Peltia L.S. Developing Sporogonium, 1s. 9d. 17 Aspidium, Sorus, Section, 1s. 9d. 18 Selaginella, Fertile Spike, 1s. 9d. 19 Lycopodium. T.S. Stem 20 Cycas revoluta, Leaf, T.S. 21 Pinus Stem, Trans. Sect. 22 Pinus, Long Sect., Ovule, 1s. 9d. 23 Orchid. T.S. Ovary 24 Mature Anther of Lily, T.S. |
|---|---|

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[Abbreviations : T.S.=Transverse Section; Rad.=Radial; Tan.=Tangential; L.S.=Longitudinal Section; V.S.=Vertical Section; E.=Entire.]

- | | | | |
|----|--|----|--|
| 1 | Vicia faba, L.S. Root Apex | 30 | Vaucheria |
| 2 | Ricinus T.S. Seed, <i>Aleurone</i> | 31 | Bacterium |
| 3 | Potato T.S. Tuber, <i>Starch</i> | 32 | Pythium, <i>Conidiospores</i> |
| 4 | Lilium Epidermis, <i>Stomata</i> | 33 | Mucor, <i>Conidiospores</i> |
| 5 | Lilium L.S. Root Apex, <i>Mitosis</i> | 34 | " <i>Zygospores</i> |
| 6 | Tradescantia L.S. Stem, <i>Direct nuclear division</i> | 35 | Saccharomyces |
| 7 | Sunflower T. and L.S. Stem (2), <i>Herbaceous type</i> | 36 | Rabbit, Stomach V.S. |
| 8 | Tilia T., Tan. and Rad. L.S. Stem (3), <i>Arboreous type</i> | 37 | " Small Intestine V.S. |
| 9 | Cucurbita T. and L.S. Stem (2), <i>Sieve tubes</i> | 38 | " Kidney V.S. |
| 10 | Sambucus T.S. Stem, <i>Lenticel</i> | 39 | " Femur T.S. |
| 11 | Ribes T.S. Stem, <i>Cork and Phellogen</i> | 40 | " Blood |
| 12 | Zea Mais T.S. Stem, <i>Monocotyledon</i> | 41 | " Nerve, Teased |
| 13 | Hippuris L.S. Stem Apex, <i>Apical Meristem</i> | 42 | " Spinal Cord T.S. |
| 14 | Bean T.S. Young Root, <i>Interfascicular cambium</i> | 43 | " Skin V.S. |
| 15 | Bean T.S. Older Root, <i>Secondary thickening</i> | 44 | " Eye V.S. |
| 16 | Prunus T.S. Leaf, <i>Type</i> | 45 | " Testis V.S. |
| 17 | Lilium T.S. Young Bud, <i>Young anthers (archesporium)</i> | 46 | " Ovary V.S. |
| 18 | Lilium T.S. Young Bud, <i>Pollen-mother-cells (division)</i> | 47 | " Intervertebral Disc. White Fibro Cartilage |
| 19 | Lilium T.S. Young Bud, <i>Dehiscent anthers</i> | 48 | " Ear T.S. Yellow Elastic Cartilage |
| 20 | Lilium T.S. Young Ovary, <i>Ovule with archesporial cell</i> | 49 | Frog—Blood |
| 21 | Lilium T.S. Ovary, <i>Embryo sac</i> | 50 | " Stomach T.S. |
| 22 | Oenothera L.S. Stigma, <i>Germinating pollen grains</i> | 51 | " Small Intestine T.S. |
| 23 | Capsella Embryo L.S. | 52 | " Femur T.S. (Decalcified) |
| 24 | Wheat L.S. Fruit, <i>Embryo in L.S.</i> | 53 | " Bladder (Flat) |
| 25 | Aspidium T.S. Rhizome | 54 | " Testis T.S. |
| 26 | " Prothallus, <i>Antheridia and archegonia</i> | 55 | " Skin V.S. |
| 27 | " L.S. Sorus, <i>Sporangia</i> | 56 | Dogfish T.S. Region of Abdomen |
| 28 | Sphaerella | 57 | " Region of Pharynx |
| 29 | Spirogyra Vegetative, <i>Conjugating and Zygospores</i> | 58 | Earthworm T.S. Intestinal Region |
| | | 59 | Amoeba |
| | | 60 | Monocystis |
| | | 61 | Hydra |
| | | 62 | Obelia (Hydroid) |
| | | 63 | " (Medusa) |
| | | 64 | Monocystis. Smear of contents of Seminal Vesicle of Earthworm showing stages in life history of Monocystis |

SERIES 38.—ANGIOSPERMS.

Complete in polished wood box. £2 17s. 6d.

- | | | | |
|----|--|----|--|
| 1 | Ricinus T.S. Seed, <i>Aleurone</i> | 26 | Piper T.S. Stem, <i>Anomalous dicotyledon scattered bundles</i> |
| 2 | Scorzonera L.S. Root, <i>Latic vessels</i> | 27 | Tamus T.S. Stem, <i>Anomalous monocotyledon</i> |
| 3 | Potato T.S. Tuber, <i>Starch</i> | 28 | Auricula T.S. Stem, <i>Polystelic</i> |
| 4 | Phajus T.S. Pseudo-bulb, <i>Leucoplasts</i> | 29 | Hippuris L.S. Stem apex, <i>Apical Meristem</i> |
| 5 | Dahlia T.S. Tuber, <i>Inulin</i> | 30 | Bean T.S. Young Root, <i>Interfascicular cambium</i> |
| 6 | Ornithogalum T.S. Seed, <i>Thickened cell wall</i> | 31 | Bean T.S. Older Root, <i>Secondary Thickening</i> |
| 7 | Ornithogalum T.S. Ovary, <i>Raphides</i> | 32 | Iris T.S. Root, <i>Thickened endodermis, etc.</i> |
| 8 | Rheum T.S. Root, <i>Crystals</i> | 33 | Dendrobium T.S. Aerial Root, <i>Velamen</i> |
| 9 | Ficus T.S. Leaf, <i>Cystoliths</i> | 34 | Prunus T.S. Leaf, <i>Type</i> |
| 10 | Nuphar T.S. Petiole, <i>Idioblasts</i> | 35 | Psamma T.S. Leaf, <i>Xerophyte</i> |
| 11 | Verbascum T.S. Leaf, <i>Hairs</i> | 36 | Hakea T.S. Leaf, <i>Xerophyte</i> |
| 12 | Lilium Epidermis, <i>Stomata</i> | 37 | Potamogeton T.S. Leaf, <i>Aquatic type</i> |
| 13 | Saxifraga T.S. Leaf, <i>Water-stomata</i> | 38 | Syringa L.S. Leaf-bud, <i>Prefoliation</i> |
| 14 | Lilium L.S. Root Apex, <i>Mitosis</i> | 39 | Sycamore L.S. Petiole and Stem, <i>Fall of Leaf (Phylloptosis)</i> |
| 15 | Tradescantia L.S. Stem, <i>Direct nuclear division</i> | 40 | Lilium T.S. Young Bud, <i>Young anthers (archesporium)</i> |
| 16 | Sunflower T. and L.S. Stem (2), <i>Herbaceous type</i> | 41 | Lilium T.S. Young Bud, <i>Pollen-mother-cells (division)</i> |
| 17 | Tilia T., Tan. and Rad. L.S. Stem (3), <i>Arboreous type</i> | 42 | Lilium T.S. Bud, <i>Mature anthers</i> |
| 18 | Cucurbita T. and L.S. Stem (2), <i>Sieve tubes</i> | 43 | Lilium T.S. Bud, <i>Dehiscent anthers</i> |
| 19 | Sambucus T.S. Stem, <i>Lenticel</i> | 44 | Lilium T.S. Young Ovary, <i>Ovule with archesporial cell</i> |
| 20 | Ribes T.S. Stem, <i>Cork and Phellogen</i> | 45 | Lilium T.S. Ovary, <i>Embryo sac</i> |
| 21 | Hippuris T.S. Stem, <i>Aquatic type</i> | 46 | Oenothera L.S. Stigma, <i>Germinating pollen grains</i> |
| 22 | Zea T.S. Stem, <i>Monocotyledon</i> | 47 | Capsella Embryo L.S. |
| 23 | Dracena T.S. Young Stem, <i>Before secondary thickening</i> | 48 | Wheat L.S. Fruit, <i>Embryo in L.S.</i> |
| 24 | Dracena T.S. Older, <i>Secondary thickening</i> | | |
| 25 | Ruscus T.S. Stem, <i>Second type Monocotyledon</i> | | |

See special note on page 312.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

SERIES 39.—GYMNOSPERMS AND CRYPTOGRAMS.

SPECIAL EDUCATIONAL SETS.

Complete in polished wood box. £2 17s. 6d.

[Abbreviations : T.S.=Transverse Section ; Rad.=Radial ; Tan.=Tangential ; L.S.=Longitudinal Section ; V.S.=Vertical Section ; E=Entire.]

- | | |
|---|--|
| 1 Pinus T., Rad. and Tan. L.S. Stem (4),
<i>Young and old stem</i> | 24 Peltia L.S. Young Sporogonium, <i>In situ</i> |
| 2 .. T.S. Leaf, | 25 Peltia L.S. Mature Sporogonium |
| 3 .. T.S. Root (2), <i>Young and old</i> | 26 Funaria L.S. Young Capsule |
| 4 .. L.S. Male cone | 27 .. L.S. Male plant, <i>Antheridia</i> |
| 5 .. L.S. Ovule, <i>Archegonia</i> | 28 .. L.S. Female Plant, <i>Archegonia</i> |
| 6 Selaginella Kraussiana Cone (E), <i>Micro and megasporangia</i> | 29 .. Protonema |
| 7 Selaginella Kraussiana L.S. Cone, <i>Developing sporangia</i> | 30 Polytrichum T.S. Stem |
| 8 Selaginella Kraussiana T.S. Stem and Rhizophore (2), <i>Monostele</i> | 31 .. T.S. Leaf |
| 9 Selaginella Willdenovii T.S. Stem, <i>Polystele</i> | 32 Sphagnum Leaf (E) |
| 10 Lycopodium L.S. Sporangiphore | 33 Pleurococcus |
| 11 .. T.S. Stem | 34 Sphaerella |
| 12 Aspidium T. and L.S. Rachis (2) | 35 Vaucheria, <i>Antheridia and Oogonia</i> |
| 13 .. T.S. Rhizome | 36 Oedogonium, <i>Oogonia</i> |
| 14 .. T.S. Root | 37 Spirogyra vegetative, <i>Conjugating and Zygosporos</i> |
| 15 .. Prothallus, <i>Antheridia and archegonia</i> | 38 Spirogyra vegetative |
| 16 .. L.S. Sorus, <i>Sporangia</i> | 39 Fucus T.S. Conceptacles, <i>Antheridia and Oogonia</i> |
| 17 Pteris T.S. Rhizome | 40 Bacterium |
| 18 .. T.S. Pinnule, <i>Marginal sporangia</i> | 41 Pythium, <i>Conidiosporos</i> |
| 19 Scolopendrium V.S. Young sorus, <i>Developing sporangia</i> | 42 Mucor, <i>Conidiosporos</i> |
| 20 Equisetum T.S. Cone, <i>Spores and elaters</i> | 43 .. <i>Zygosporos</i> |
| 21 .. T.S. Stem | 44 Agaricus V.S. Pileus |
| 22 Peltia L.S. Thallus, <i>Archegonia</i> | 45 Penicillium, <i>Conidiosporos</i> |
| 23 Peltia L.S. Thallus, <i>Antheridia</i> | 46 Eurotium, <i>Conidiosporos</i> |
| | 47 Claviceps L.S. Stroma |
| | 48 Saccharomyces |

SERIES 40.—SPECIAL SET FOR TEACHERS.

Complete in polished wood box. £2 0s. 0d.

- | | |
|---|--|
| 1 Vicia faba, T.S. Seed, <i>Starch</i> | 22 Zea mais, T.S. Stem, <i>Type monocot</i> |
| 2 Ricinus, T.S. Seed, <i>Aleurone</i> | 23 Sambucus, T.S. Stem, <i>Lenticel</i> |
| 3 Wheat, L.S. Fruit, <i>Embryo</i> | 24 Tilia, T.S. Stem, <i>Woody type</i> |
| 4 Cress—Entire Root, <i>Root hairs</i> | 25 Tilia, R.L.S. Stem |
| 5 Vicia faba, L.S. Root Apex, <i>Meristem</i> | 26 Hippuris, L.S. Stem Apex, <i>Meristem</i> |
| 6 Vicia faba, T.S. Root, <i>Type</i> | 27 Hippuris, T.S. Stem, <i>Aquatic</i> |
| 7 Dahlia, T.S. Tuber, <i>Inulin</i> | 28 Potato, T.S. Tuber, <i>Starch</i> |
| 8 Box Leaf, <i>Epidermis</i> | 29 Vicia faba, Anther and Stigma |
| 9 Lilium Epidermis, <i>Stomata</i> | 30 Lilium, T.S. Flower-bud |
| 10 Prunus, T.S. Leaf, <i>Type</i> | 31 .. Anthers, 3 stages T.S. |
| 11 Pinus, T.S. Leaf | 32 .. T.S. Ovary, <i>Embryo sac</i> |
| 12 Verbascum, T.S. Leaf, <i>Hairs</i> | 33 Oenothera, L.S. Stigma, <i>Pollen cells</i> |
| 13 Erica, T.S. Leaf, <i>Xerophyte</i> | 34 Capsella (Shepherd's Purse), <i>Ovule with Embryo</i> |
| 14 Empetrum, T.S. Leaf, <i>Xerophyte</i> | 35 Wheat Flower, <i>Grass type</i> |
| 15 Psamma, T.S. Leaf, <i>Xerophyte</i> | 36 Drosera Leaf (Sundew) |
| 16 Sycamore, T.S. Leaf Bud | 37 Utricularia (Bladderwort). |
| 17 Willow, T.S. Leaf Bud | 38 Sphagnum (Piece of Bog-moss shoot). |
| 18 Potamogeton, T.S. Leaf, <i>Aquatic</i> | 39 Yeast. |
| 19 Cucurbita, T.S. Stem, <i>Sieve plates</i> | 40 Mucor (Black Mould) |
| 20 Cucurbita, L.S. Stem, <i>Sieve tubes</i> | 41 Eurotium (Green Mould) |
| 21 Sunflower, T.S. Stem, <i>Type dicot</i> | |

SPECIAL NOTE.—Sets 37, 38, 39, 40, are all offered at a special price for teaching purposes. These sets cannot be sold other than as units. Single slides will be charged at the full catalogue prices shown elsewhere in this list.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY

DIATOMACEAE.

TEST OBJECTS. Each, 1s. 9d.

Mounted either **Dry**,* in **Balsam**, in **Styrax**, or in **Hyrax**.† The diatoms are mounted with thin covers for use with highest power objectives.

Refractive Indices of Mountants are :—

Realgar 2.549. **Hyrax** 1.71. **Styrax** 1.582. **Balsam** 1.526.

Amphipleura pellucida, *Pleurosigma angulatum* and *Surirella gemma* can be supplied mounted in **Realgar**, 7s. 6d. each.

NAVICULA.	NITZCHIA.	PLEUROSIGMA.	
<i>N. cuspidata</i>	<i>N. curvula</i>	<i>P. angulatum</i>	<i>P. fasciola</i>
<i>N. rhomboides</i>	<i>N. maxima</i>	<i>P. balticum</i>	<i>P. littorale</i>
<i>N. Smithii</i>	<i>N. obtusa</i>	<i>P. formosum</i>	<i>P. accuminatum</i>
<i>N. firma</i>	<i>N. sigma</i>	<i>P. hippocampus</i>	<i>P. strigilis</i>
<i>N. lyra</i>	<i>N. valida</i>	<i>P. attenuatum</i>	<i>P. aestuari</i>
<i>N. crabro</i>	<i>N. sigmoidea</i>	<i>P. elongatum</i>	<i>P. strigosum</i>
<i>N. crassinervis</i>			

VARIOUS.

Amphipleura Lindheimerii
Amphipleura pellucida
Cymatopleura solea
Cymbella gasteroides
Doryphora Boeckii
Frustulia saxonica
Grammatophora marina
Grammatophora robusta
Grammatophora serpentina
Grammatophora subtilissima
Hyalodiscus stelliger

Hyalodiscus subtilis
Navicula retrusa
Nitzschia sigmoidea
 " *amphioxys*
Rhizoselenia styliiformis
Striatella unipunctator
Synedra crystallina
Surirella gemma
Surirella striatula
Van Heurckia Lewisinia

Disc of Deal (Dr. Carpenter's Test for Achromatism, 1s. 6d.)

Proboscis of Blow-Fly prepared as a Test Object, 1s. 6d.
 Pygidium of Flea, 1s. 6d.

SERIES 45.—SET OF 12 TEST OBJECTS FOR VARIOUS POWERS.

Very perfect Specimens. In case, £1 5s. 0d.

Amphipleura pellucida
 Disc of Deal
 Proboscis of Blow-Fly
Pleurosigma angulatum
 " *formosum*
Navicula rhomboides

Pygidium of Flea
 Scales of Butterfly
Arachnoidiscus Ehrenbergii
Surirella gemma
Nitzschia sigma
Nitzschia scalaris

TEST SLIDES. Mounted in Styrax.

Cover Glass thickness 01.6—0.18 m/m. Mounted either Dry, in Balsam or in Hyrax to order.

These preparations consist of Diatomaceæ suitable for testing Objectives of various powers.

Test Slide with 8 Diatoms	£0 7 6	Test Slide with 30 Diatoms	£1 12 6
" " 15 "	0 15 0	" " 50 "	2 2 6
" " 20 "	1 0 0		

All the above have list of names.

* NOTE.—Very few slides are kept in stock mounted Dry. As much notice as possible should be given when ordering, as they have to be mounted specially. Diatoms, unless otherwise asked for, will be supplied mounted in Styrax.

† A new medium consisting of a synthetic resin known as HYRAX is now sometimes used for the mounting of diatoms. It has a fairly high refractive index and is an advance on Styrax, but is limited in its use as it can only be used on the finer diatoms. It renders coarse diatoms, such as *Eupodiscus argus* very opaque. Slides of diatoms mounted in Hyrax can be mounted to order. We cannot guarantee the permanency of Hyrax mounts.

Watson's HOLOSCOPIC Objectives will be found the best obtainable for Diatom resolution. High numerical aperture. Will stand deep eyepiecing.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

DIATOMACEAE

(continued).

TYPE AND GENUS SLIDES.

Mounted to order only.

DIATOMS.

The following **Type Slides** are all of a high degree of excellence. They can be supplied mounted in StyraX or in Balsam. The price in each case includes a list of names.

Complete slides of all available species of any genus can be prepared to order. Quotations submitted to meet individual requirements.

Customers are requested to state mountant preferred.

						£	s.	d.
1,000 species, arranged and classified upon 10 slides, with list of names in case						20	0	0
500	"	"	"	5	"	10	0	0
250	"	"	"	"	"	4	10	0
100	"	"	"	"	"	1	16	0
50	"	"	"	"	"	0	18	0
25	"	"	"	"	"	0	9	0

GENUS SLIDES, Mounted in StyraX, to order only.

						£	s.	d.
Actinoptychus	50 species with list	-	-	-	-	1	15	0
"	100 " " "	-	-	-	-	3	5	0
Coscinodiscus	50 " " "	-	-	-	-	1	15	0
"	100 " " "	-	-	-	-	3	5	0
Navicula	50 " " "	-	-	-	-	1	5	0
"	100 " " "	-	-	-	-	2	10	0
"	150 " " "	-	-	-	-	3	5	0
Pleurosigma	25 " " "	-	-	-	-	1	5	0
"	50 " " "	-	-	-	-	2	10	0
Surirella	25 " " "	-	-	-	-	1	5	0
"	50 " " "	-	-	-	-	2	10	0

No. 1.	400 Diatoms, 330 different species, with name photographed on slides under each species, in case	-	-	-	-	7	10	0
No. 2.	100 Diatoms, the name photographed on the slide under each species	-	-	-	-	2	0	0
No. 3.	40 Diatoms, the name photographed on the slide under each species	-	-	-	-	1	0	0
No. 4.	20 Diatoms, with name photographed on the slide under each species	-	-	-	-	0	12	6
No. 5.	5 Diatoms, with name, aperture and magnification necessary to resolve it, photographed under each species	-	-	-	-	0	5	0
No. 6.	Test Slide of 60 Diatoms and Catalogue	-	-	-	-	2	7	6
No. 7.	" " 20 " " "	-	-	-	-	1	0	0
No. 8.	Type slide, 34 different species, Holothuria and Synaptae	-	-	-	-	3	0	0
No. 9.	" " 12 " spines of Echini	-	-	-	-	1	10	0

SERIES 43.—SET OF 24 CHOICE SELECTED DIATOMS.

All very beautiful forms, in Symmetrical Groups. Complete in case, £2 3s. 6d.

This set is subject to alteration in the event of specimens being out of stock.

1 Actinocyclus Ralfsii	13 Eupodiscus argus
2 Actinoptychus Heliopelta	14 Gomphonema geminatum
3 Arachnoidiscus Ehrenbergii	15 Isthmia nervosa
4 Asteromphalus Ralfsianus	16 Navicula lyra
5 Aulacodiscus solitanus	17 Nitzschia scalaris
6 Biddulphia pulchella	18 Omphalopelta versicolor
7 Campylodiscus spiralis	19 Pinnularia lata
8 Coscinodiscus excavatus	20 Stictodiscus californicus
9 Craspedodiscus coscinodiscus	21 Surirella constricta
10 Cymatopleura elliptica	22 Synedra robusta
11 Euodia frauenfeldii	23 Triceratium favus
12 Eunotia falx	24 Trinacria regina

Watson's HOLOSCOPIC Eyepieces enable Objectives to perform at the best advantage.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

DIATOMACEAE

(continued).

GROUPED DIATOMS, ETC.

The following Slides are composed of Specimens of various Diatoms from the localities named, not in symmetrical order. They are most interesting and effective. Apart from their artistic value, the specimens are all very perfect and form admirable type and test slides, and are unsurpassed for exhibition purposes.

Groups of Diatomaceæ from the following localities:—

50 species - - - - each £0 12s. 6d.
100 " - - - - " £1 0s. 0d.

Adriatic Sea	Hungary	New Jersey
Africa	Indian Ocean	Oamaru
Antarctic Ocean	Freshwater Forms	Pacific Ocean
Atlantic Ocean	Marine Forms	Russia
Australia	Japan	Samoa
British Isles	Leipsig	Simbirsk
California	Levant	Western Mediterranean
Connecticut	Maryland	West Coast of U.S.A.
Corsica	North Sea	Brackish-water Forms
France		

DIATOMACEÆ.

Selected Specimens, each 1s. 9d.

Achnanthes brevipes	Biddulphia pulchella	B. Baileyis
A. longipes	B. aurita.	B. rhombus
Actinocyclus Ehrenbergii	Campylodiscus costatus	
A. Ralfsii	C. spiralis	C. superbus
A. subtilis	C. clypeus	C. nonicus
A. dubius	C. costatus	
Actinoptychus splendens	Cerataulus turgidus	
A. halionyx	Climosphenia moniligera	
A. heliopelta (Heliopelta metii)	Cocconeis splendidum	
A. splendens	Coscinodiscus asteromphalus	
A. Stella	C. elegans	C. excavatus
Actinophena splendens	C. oculus iridis	C. radiatus
Amphiprora alata	C. secerendus	C. crassus
Amphitetras alternans	C. gigas	C. omphalanthus
A. antediluviana	C. robustus	
A. elegans	Corinna elegans	
Amphora ovalis	Craspedodiscus coscinodiscus	
Arachnoidiscus Ehrenbergii	C. elegans	
A. japonicus	A. ornatus	
Asterolampra vulgaris	Cresswellia coronata	
Asteromphalus arachne	Cyclotella astræa	
A. Brookei	Cymatopleura elliptica.	C. Solea
Asteromphalus Darwinii	Cymbella Ehrenbergii	
Aulacodiscus africanus.	C. gastroides	
A. oregonus.	C. cuspidata	
A. sollitianus.	Doryphora Bæckii	
A. kittonianus	Epithemia turgida	
Auliscus cælatus	E. Hyndmanni	
A. sculptus	Euodia Frauentfeldii.	E. gibba
A. macreanus	Eunotia robusta	
A. oamaruensis	Eupodiscus argus	
Brebissonia Bæckii	Eupodiscus commutatus	
(Doryphora Bæckii)	Eupleuria pulchella	
	Gomphonema geminatum	

Use the Nelson Cassegrain Darkground Condenser for the resolution of diatoms.

Price £3 17s. 6d., optical part only.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

DIATOMACEAE

(continued).

Selected Specimens, each, 1s. 9d.

Grammatophora robusta	Rhabdonema adriaticum
Heliopelta metii (Actinoptychus heliopelta)	Rhabdonema arcuatum. R. crosieri
Hemidiscus cuneiformis	Solium exsculptum
Hyalodiscus stelliger	Stauroneis acuta
Hydrosera wampoensis	S. fulmen var capitata
Isthmia enervis I. nervosa	S. phoenicenteron
Liomphora splendida	Stephanodiscus niagarae
Melosira arenaria M. roseana	Stictodiscus Californicus
Meridion circulare	S. Hayitianus
Navicula crabo N. elliptica	Surirella elegans S. striatula
N. Episcopalis var brevis	S. nobilis S. turgida
N. firma N. lyra	S. gemma S. constricta
N. major N. splendida	S. fastuosa S. febigerii
N. dilatata N. rhombus	S. biseriata S. robusta
N. latissima N. fusca	S. norwegica S. hastata
N. sculpta N. Smithii	Synedra capitata S. splendens
N. Robertisiana N. praetexta	S. robusta
Nitzschia grandis	S. crystallina
N. scalaris	Systephania diadema
N. sigma	Terpsinoe musica T. americana
N. maxima	Triceratium arcticum T. favus
N. Brebissoni	T. grande
Omphalopelta versicolor	T. variabile
Orthosira arenaria	T. scitulum T. pentacrinus
Orthoneis splendida	T. formosum T. gibbosum
Pinnularia lata P. major	Trinacria excavata
P. nobilis P. viridis	T. regina
Pleurosigma quadratum	Tryblionella gracilis T. circumscuta
P. lacustra	Van Heurckia rhomboides

DIATOMACEAE—Strewn Slides.

Mounted in Styrax from any of the following localities. Price 1s. 0d. each.

Freshwater Deposits: Recent

Cleveland, Ohio, U.S.A.
Denmark
Hudson River, New York, U.S.A.
Italy
Ladoga Lake, Russia
Lake Victoria, East Africa
Leipsig, Germany
Nova Scotia, Canada
St. Moritz Lake, Switzerland
Trondjem, Norway

Freshwater Deposits: Fossil

Akaroa, New Zealand
Berlin, Germany
Cherryfield, Maine, U.S.A.
Chiloé Isle, South America
Dolgelly, N. Wales
Isle of Skye, Scotland
Ongaroto Valley, New Zealand
Puy de Dome, France
St. Peter's, Hungary
Santa Fiora, Italy
Stavanger, Norway

Sea-water Deposits: Recent

Adelaide, Australia
Antarctic Ocean
Apio, Samoa
Caspian Sea
Cuxhaven, Germany
Gulf of Mexico
Java
Naples, Italy
Pola, Adriatic Sea
Paget Sound, Washington, U.S.A.

Sea-water Deposits: Fossil

Algier, Africa
Moron, Spain
Mors, Jutland
Nottingham, Maryland, U.S.A.
Oamaru, New Zealand
Oran, Africa
Richmond, Virginia, U.S.A.
St. Peter's, Hungary
Santa Monica, California, U.S.A.
Sendai, Japan
South Yarra, Australia
Simbirsk, Russia

Diatomaceous Ooze, from "Challenger" Expedition, March 1874, 195 fathoms.
1s. 6d. each.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

FORAMINIFERA.

Type slide of 10 species, with list of names	-	-	-	-	-	-	-	-	-	£0 6 0
" " 17 " " " "	-	-	-	-	-	-	-	-	-	0 8 6
" " 22 " " " "	-	-	-	-	-	-	-	-	-	0 10 0
" " 25 " " " "	-	-	-	-	-	-	-	-	-	0 12 6
" " 50 " " " "	-	-	-	-	-	-	-	-	-	1 7 6
" " 75 " " " "	-	-	-	-	-	-	-	-	-	2 0 0
" " 100 " " " "	-	-	-	-	-	-	-	-	-	2 10 0

Strewn slides of Foraminifera, each **1s. 6d.**, from any of the following localities.—

Atlantic, E. of Azores, 1,650 fathoms	Coast of Australia, 150 fathoms
Adriatic Sea, 1,800 "	Globigerina Ooze from Atlantic Ocean
Caribbean Sea, 1,500 "	Coral Sea, Queensland, 410 fathoms
S.W. of Guinea, 1,680 "	From Chalk, Keston, Kent
Red Sea, 250 "	" " Strood Hill, Kent
Great Barrier Reef, Australia, 76 "	West Indies, 110 fathoms
W. of Spain, 1,060 "	Off Ranies Island, 155 "

Foraminifera arranged in circular groups, 50 forms, from the following localities
10s. 0d. per slide (see illustration page 329).

Recent Deposits

Cuxhaven, North Sea
Trieste, Adriatic Sea
Sussex, England
Corsica
Bergen, Norway
Gulf of Naples, Italy
Samoa
Coast of Barbados
Colombo, Ceylon
Shetland Isles, Scotland

Recent Deposits

Hong Kong, China
Adelaide, Australia

Fossil Deposits

Vienna, Austria
St. Peter's, Hungary
Bologna, Italy
Bavaria
Moravia
Sicily

RADIOLARIA.

Type slide of 10 Radiolaria, with list of names	-	-	-	-	-	-	-	-	-	£0 8 0
" " 25 " " " "	-	-	-	-	-	-	-	-	-	0 12 6
" " 50 " " " "	-	-	-	-	-	-	-	-	-	1 7 6
" " 75 " " " "	-	-	-	-	-	-	-	-	-	2 0 0
" " 100 " " " "	-	-	-	-	-	-	-	-	-	2 10 0

Strewn slides of **Radiolaria**, from any of the following localities, **1s. 6d.** each.

Springfield, Barbados	Mt. Wilton, Barbados
Bissex Hill, Barbados	Chimborazo
Cambridge Estate, Barbados	Hayti

Watson's Holoscopic Oil Immersion Condenser is designed to exhaust the possibilities of all Oil Immersion Objectives. **OPTICAL** part only **£8 0s. 0d.**

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

RADIOLARIA

(continued).

Arranged in circular groups, 50 forms, from the following localities.

Price 10s. 0d. per slide (see illustration, page 329).

? 100.
331.

RECENT DEPOSITS.

Samoa, South Sea
Antarctic Sea
Gulf of Mexico
Indian Ocean
Gulf of Naples
Sandwich Isles
S. Lat. 12° 5' 00", E. Long. 169° 07'
00", depth 1,080 fathoms.

FOSSIL DEPOSITS.

Barbados
San Pedro, California, U.S.A.
Spain
Russia
Oran, Africa
Sicily
Hayti, West Indies
Indian Ocean

PLANKTON-DIATOMS.

Type slide of 10 Plankton-Diatoms, with list of names	- - -	£0 8 0
" " 20 " " " "	- - -	0 18 0
" " 30 " " " "	- - -	1 4 0

Strewn slides of Plankton-Diatoms, from the following localities.

Price 1s. 6d. each.

North Sea
Bergen Fiord, Norway
Baffin Bay, N. America
Gulf of Siam
Adriatic Sea
Japan
Shetland Isles

Jersey, from a canal
Gulf of Naples, Italy
Java Sea
Zurick Sea, Switzerland
Antarctic Ocean
Firth of Tay, Scotland
Indian Ocean

Plankton-Diatomaceae, arranged in circular groups, 50 forms, from the following localities. Price 15s. 0d. per slide (see illustration page 330).

Indian Ocean
Adriatic Sea
Baffin Bay, N. America

Antarctic Ocean
North Sea
Pacific Ocean

SPICULAE.

Strewn slides, mounted transparent, 1s. 6d. each.

Spicules of Sponge from Japan
" " Euplectella
" " Grantia compressa
" " Melitia Octerecia

Spicules of Gorgonia from Jamaica
" of Alcyonium
" of Pachymatisma

Watson's Holo Immersion Paraboloid gives excellent dark grounds and is especially useful for the resolution of striated objects. OPTICAL part only £2 15s. 0d.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

ENTOMOLOGY.

1s. 6d. each, unless otherwise stated.

HYMENOPTERA.

Apidae. Bees

- Queen. Whole insect, **10s. 6d.**
- Worker " "
- Drone " "
- Worker, Antenna
- " Eye, Cornea
- " Hor. Section **2s. 6d.**
- " Head showing mouth parts
- " Proboscis or tongue
- " Trachea
- " Genital Organs
- " Spiracle
- " Sting
- " 1st leg with antennæ comb
- " 2nd leg with spur
- " 3rd leg with pollen basket
- " Wings hooked together as in flying
- Abdominal segments, showing wax plates of Bee
- Humble Bee, Leg and Foot
- Acarapis Woodi, Isle of Wight Disease, **2s. 6d.**
- Nosema Spores, *in situ* in stomach of Bee, **2s. 6d.**
- Nosema Spores in contents of stomach of Bee, **2s. 6d.**

Formicidae. Ants

- Garden Ant, *Lasius niger*, whole insect
- " " " " pupa
- House Ant, *Myrmica molesta*, whole insect
- Crazy Ant, *Premelopia longicornis*, whole insect
- Wood Ant, *Formica rufa*, whole insect
- Spiked Ant, From New Zealand
- Winged Ant, *Formica flava*
- Ants, showing various stages of life history, mounted in fluid, on one slide, **2s. 6d.**
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Vespidæ—Wasps

- Vespa Vulgaris*, whole insect
- " " Mouth and Jaws
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- " " Leg and Foot
- " " Sting and poison sac
- " " Wing, hooked
- " " " unhooked
- " " " folded

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- Ichneumon Fly, *Ophion luteum*, whole insect
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- " Ovipositor with saws
- " Leg
- Gall Fly, *Trypeta parietina*, whole insect

DIPTERA.

- Biting Field Fly, *Stomoxys calcitrans* whole insect
- " Fly (Clegg), *Hæmatopota pluvialis*, whole insect
- Blow Fly, *Calliphora vomitoria* whole male insect
- " " " female "
- " Antenna
- " Cornea of Eye
- " Vert. Sect. of Eye, **2s. 6d.**
- " Head and Tongue
- " Proboscis
- " Genital Organs
- " Spiracles
- " Leg and Foot
- " Ovipositor
- " Buzzing Organ
- " Alimentary Canal
- " Stomach
- " Trachea
- " Wings
- Corn Fly, *Empis livida*, whole insect
- Crane Fly, *Tipula longicornis*, whole insect
- " " Spiracle of larva
- " " Male organs
- " " Mouth organs
- " " Head
- " " Ovipositor
- " " Haltere
- " " Section through Head and Eyes, **2s. 6d.**
- " " larva
- Drone Fly, *Eristalis tenax*, Tongue
- " " " Head
- " " " Wing
- " " " Genital Organs
- Dung Fly, *Scataphaga* sp.
- Fantail Fly, *Dolichopus nigripennis*, whole insect
- Flirt Fly, *Sepsis punctum*, whole insect
- Fungus Fly, *Nemapoda*, whole insect
- Gnat, *Culex pipiens*, whole male insect
- " " " " female "

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Diptera.—(Continued.)

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" " " emerging from pupa case, 2s. 6d.
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" " " head, showing lancets
" " " wing
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" " " head with tongue
" " " genital organs
" " " leg and foot
" " " ovipositor
" " " muscle
" " " halterers
" " " wings
Gad Fly, <i>Chrysops relictus</i> , whole insect
" <i>Tabanus bovinus</i> , whole insect
" antenna
" cornea
" mouth organs
" leg and foot
" allulet
" haltere
" wing
" trachea
Merrydancer, <i>Hilara maura</i> , whole insect
Midge, <i>Psychoda phalœnides</i> , whole insect

NEUROPTERA.

Dragon Fly, <i>Agrion pulchellum</i> , whole insect
" " " head

Neuroptera.—(Continued.)

Dragon Fly, <i>Agrion</i> , vert. sect. of eyes, 2s. 6d.
" " " cornea
" " " ovipositor
" " " wing
" " " larva
Scorpion Fly, <i>Panorpa vulgaris</i> , whole male insect
" " " female "
" " " mouth organs
May Fly, <i>Ephemera</i> , vert. sect. head and eyes. 2s. 6d.
Whole larva, mounted in fluid, 2s. 6d.

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Bed Bug, <i>Cimex lectularius</i> , whole insect
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Aphis <i>rosæ</i> , whole insect
Aphis from Thistle, " "
" " Nettle, " "
Blight of Grape Vine, <i>Phylloxera vastatrix</i> , Larva 2s. 0d.
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" " " larva
" " " pygidium
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" (Cat) " felis
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" (Rat) <i>Ceratophyllus fasciatus</i>
" (Pig) <i>Haematopinus suis</i>
" (Horse) <i>Haematopinus asini</i>
Water Boatman, <i>Notonecta glauca</i> , whole insect
" " " head
" " " paddle
Water Bug, <i>Corixa fossarum</i> , whole insect
" " " mouth organs
" " " oar leg
" " " elytron
" " " abdominal segments, showing stridulating organs
Water Scorpion, <i>Nepa cinerea</i> , whole insect
Pond Skater, <i>Gerris lacustris</i> , whole insect

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- " " first leg
- " " second leg
- " " paddle
- Water Beetle, *Dytiscus marginalis*, whole insect
- " " larva
- " " first leg with suckers, transparent, or opaque
- " " oar leg
- " " legs from female
- " " cornea of eye, to show multiple images, **1s. 9d.**
- See illustration and note, page 322
- " " Antenna
- " " Mouth organs, showing mandibles
- " " Spiracle
- " " Trachea
- " " Elytron
- " " Genitalia
- Cockchafer, *Melolontha*, antenna
- " " male
- " " female
- " " leg of larva
- " " skin of larva

ORTHOPTERA.

- Cockroach, *Periplaneta orientalis*, head with mouth organs
- " " salivary gland
- " " antenna
- " " leg
- " " wing
- " " gizzard

Orthoptera.—(Continued.)

- Cockroach, *Periplaneta*, genital organs
- " " ovipositor
- " " elytron
- Earwig, *Forficula auricularia*, whole insect
- " head
- " leg, showing muscles
- " elytron and wing
- " forceps
- Cricket, *Gryllus*, hind leg
- " " fore leg
- " " antenna
- " " ovipositor
- " " elytron
- " " wing
- " " head
- " " tongue
- " " gizzard
- " " chirping file and drum
- Grasshopper, *Locusta viridis*, whole insect

THYSANURA.

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- Scales from Wing of Fritillary Butterfly
- For list of Eggs and Wings of Butterflies and Moths, see under Opaque, Page 352
- Silk Moth, *Bombyx mori*, head
- " " spinneret
- " " trachea

MYRIOPODA.

- Centipede, *Lithobius forficatus*, whole insect cleared to show chitinous parts
- Millipede, *Iulus terrestris*, whole insect cleared to show chitinous parts

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- Harvest Spider, *Phalangium cornutum*, whole insect
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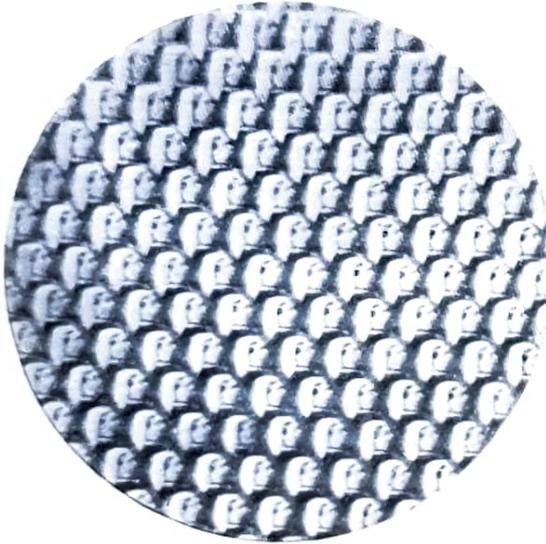
(Continued.)

- Hunting Spider, *Drassus lucifergus*, whole insect
 Jumping Spider, *Salticus*, whole insect
 " " head and eyes mounted opaque
 Water Spider, *Argyroneta aquatica*, whole insect
 Wolf Spider, *Lycosa agrestica*, whole insect
 Many others to order.
 Garden Spider, *Epeira diadema*, whole insect
 " " section of entire spider showing eye spinnerets, etc., 3s. 6d.
 " " mouth parts showing poison holes in fangs

Arachnoidea.—Spiders and Mites—

(Continued.)

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 " " ovipositor and lungs
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Cornea of Eye of Water Beetle, *Dytiscus marginalis*, showing multiple images.

CORNEA OF EYE OF BEETLE.

One method which can be employed to show the multiple images :—

Place the slide on the stage of the microscope, and focus with a $\frac{3}{4}$ " or 1" objective. Remove the optical part of the condenser and set the mirror in position. Cut a cross or any simple and easily recognisable device from coloured paper, gelatine or similar substance, and place it on the mirror. Then rack the coarse adjustment backwards very carefully, until the device is seen in each facet. To increase contrast and sharpen the image partially close the iris diaphragm.

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 Augite granite, Boosberg, Sewen, Vosges
 Binary granite, Malvern
 Luxullianite, Luxullyan, Cornwall
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 Olivine gabbro, Banff, N.B.
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 Augite-picrite, Inchcolm, Firth of Forth
 Lherzolite, Lac de Lherz, France
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 " Green " "
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 Greisen, Lake District and/or Cornwall
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 Rhomb porphyry, Scandinavia
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Prussia
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wall
Nepheline leucite phonolite, Southern
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Leucitophyre, Reiden, The Eifel

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Perlitic Pitchstone, Pusti Hrad, Hun-
gary
Liparite perlite, Hungary
Glassy Pantellarite, Isle of Pantellaria
Rhyolite, Shap, Westmorland
Epidosite, Madras, India
Epidote, Norberg, Sweden

Andesites

Hypersthene andesite, Dumyat, Stir-
ling
Andesite, Arenig, N. Wales
Hornblende andesite, Germany
Biotite andesite, Craigowerhouse,
Auchtermuchty, Fife
Augite andesite, Hummerish, Germany
Andesitic Tuff, Church Stoke, Salop

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Basalt, Giant's Causeway, N. Ireland
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Tachylyte (soda), South Wales

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Chistolite slate, Cumberland
Andalusite slate, Cumberland
Hornstone, Benscliff Wood, Charnwood
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Aymestry limestone, Mocktree Hill,
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Oolitic limestone, Osmington, Dorset
Purbeck limestone, Dorset
Crystalline limestone, Carrara, Italy
Nummulitic limestone, Ghiseh, Egypt
Chalk, Strood Hill, Kent
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COMPLETE SETS OF EDUCATIONAL PREPARATIONS.

Specially selected for Students' use. Each set is in an Oak Case with movable trays. Price, **£2 2s. 0d.** each set. As supplied to the leading County Councils and Educational Authorities, for Secondary Schools, etc.

Any of the following specimens can be supplied apart from the set at **1s. 9d.** each slide unless otherwise stated.

SERIES No. 67.—PHYSIOLOGY.

- | | |
|---|---|
| <ul style="list-style-type: none"> 1 Blood of Man 2 " Frog 3 Epithelium Squamous 4 " Columnar 5 " Ciliated 6 Endothelium 7 Pigment Cells 8 White Fibrous Tissue 9 Tendon, Trans. Sect. 10 Elastic Tissue 11 Mucous Tissue 12 Adipose Tissue 13 Hyaline Cartilage | <ul style="list-style-type: none"> 14 Fibro Cartilage 15 Elastic Cartilage 16 Ossifying Cartilage, Long. Sect. 17 Compact Bone, Trans. Sect. Femur,
2s. 6d. 18 Compact Bone, Long. Sect. Femur,
2s. 6d. 19 Involuntary Muscle 20 Voluntary Muscles 21 " " Nuclei 22 Nerve Fibres, medullated 23 " " non-medullated 24 " Trans. Sect. |
|---|---|

SERIES No. 69.—PHYSIOLOGY.

- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Heart Muscle 2 Capillaries in Pia Mater 3 Aorta, Trans. and Long. Sects. 4 Small Artery, Trans. and Long. Sects. 5 Small Vein, Trans. and Long. Sects. 6 Lung, T.S. through a bronchus 7 " Squamous Epithelium of
Vesicles 8 Trachea, Trans. Sect. 9 Epiglottis, Trans. Sect. 10 Lip, Vert. Sect. 11 Tongue, Anterior portion, Filiform
papillæ | <ul style="list-style-type: none"> 12 Tongue, Posterior portion, Circumvallate
papillæ 13 Tooth, Long. Sect., 2s. 6d. 14 Salivary Gland, submaxillary 15 Oesophagus, Trans. Sect. 16 Stomach, Cardiac end, Vert. Sect. 17 " " Horizontal Sect. 18 " Pyloric end, Vert. Sect. 19 Duodenum, Trans. Sect. 20 Small Intestine, Trans. Sect. 21 " " Peyer's patch 22 Large " Trans. Sect. 23 Liver, Trans. Sects. 24 Pancreas, Trans. Sects. |
|---|--|

SERIES No. 71.—PHYSIOLOGY.

- | | |
|--|--|
| <ul style="list-style-type: none"> 1 Tonsil, Vert. Sect. 2 Lymphatic Gland, Trans. Sect. 3 Thymus Gland, Trans. Sect. 4 Thyroid Gland, Trans. Sect. 5 Suprarenal Gland, Trans. Sect. 6 Spleen, Trans. Sect. 7 Kidney, Trans. Sect. 8 Ureter, Trans. Sect. 9 Bladder, Trans. Sect. 10 Skin, Vert. Sect. 11 Scalp, Vert. Sect. 12 " Horizontal Sect. | <ul style="list-style-type: none"> 13 Nail, Trans. Sect. 14 Spinal Cord, Trans. Sect. 15 Medulla oblongata, Trans. Sect. 16 Cerebellum, Trans. Sect. 17 Cerebrum, Trans. Sect. 18 Cornea, Vert. Sect., 2s. 19 Sclerotic, Vert. Sect., 2s. 20 Crystalline Lens, Vert. Sect., 2s. 21 Choroid, 2s. 22 Ciliary Muscle, 2s. 23 Retina, Vert. Sect., 3s. 24 Eyelid, Vert. Sect., Meibomian Glands,
1s. 9d. |
|--|--|

SERIES No. 73.—PHYSIOLOGY.

- | | |
|---|---|
| <ul style="list-style-type: none"> 1 Testicle, Trans. Sect. 2 Epididymis, Trans. Sect. 3 Vas deferens, Trans. Sect. 4 Prostate Gland, Trans. Sect. 5 Penis, Trans. Sect. 6 Ovary, T.S., Graafian follicles 7 Ovary, Corpora lutea 8 Fallopian Tube 9 Spermatozoa 10 Mammary Gland, passive 11 Mammary Gland, active 12 Placenta, Trans. Sect. | <ul style="list-style-type: none"> 13 Nose, Trans. Sect., Olfactory Bulb 14 Organ of Corti from ear 15 Clitoris, Trans. Sect. 16 Uterus, cervix showing mucosa 17 Vagina, Vert. Sect. 18 Umbilical Cord, Trans. Sect. 19 Urethra from penis of child 20 Vesicula seminalis 21 Vermiform appendix, Trans. Sect. 22 Rectum, Vert. Sect. 23 Pituitary Body, T.S. 24 Pineal Gland, T.S. |
|---|---|

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

HISTOLOGY, HUMAN.

1s. 9d. each, unless otherwise stated.

Additional Specimens are listed in sets 67, 69, 71, 73.

THE HUMAN EYE.

2s. 0d. each, unless otherwise stated.

CORNEA—Trans. Sect.
Stratified Pavement Epithelium 2s. 6d.,
Bowman's Membrane
Fixed Corneal Corpuscles, 3s. 0d.
Lymph Spaces, negative images, 3s. 0d.
Descemet's Membrane
Nerves, 3s. 0d.

IRIS—Meridional Sect.

CHOROID—Trans. Sect.
Pigment Cells

LENS—Meridional Sect.

Ciliary Body, Muscle and Suspensory Ligament

Sclera, Trans. Sect.

Retina, Trans. Sect. showing Rods and Cones, 3s. 0d.

Junction with Ligament of Ciliary body

OPTIC NERVE—

Long. Sect.

Trans. Sect.

CHIASMA—

Hor. Sect. showing connective tissue

ENTIRE EYE—

Showing Cornea, Lens, Iris, Ciliary region, Retina, Choroid, Sclera, Optic Nerve, etc., 5s. 6d.

Eyelid and Meibomian Gland, Vert. Sect., 1s. 9d.

Lachrymal Gland, 1s. 9d.

No. 61.—Set of 15 Slides, illustrating the Structure of the Human Eye, in case, £1 15s. 0d.

TISSUES, VARIOUS.

EPITHELIUM—Squamous

Columnar	Transitional
Ciliated	Stratified

TISSUES—Connective

Arcolar	Adipose
White Fibrous	Mucous
Yellow Elastic	Tendon, L.S.
	„ T.S.

CARTILAGE—Articular

Elastic from Ear	Hyaline
Fibro	Ossifying

CIRCULATORY SYSTEM.

Heart, to show muscular structure
Aorta, Trans. and Long. Sections
Small Artery, „ „
Small Vein, „ „
Capillaries in Pia Mater

RESPIRATORY SYSTEM.

NOSE—Nostril

Septum

Sebaceous Glands

Olfactory bulb, Trans. Sect.

Larynx, Trans. Sect.

Lung, Trans. Sect. through Bronchus

„ squamous epithelium of vesicles

„ injected, Trans. Sect.

Trachæ, Trans. Sect.

EAR.

Human Cochlea. Vert. Sect. 5s. 0d.

Cochlea from Guinea Pig, 3s. 6d.

BONE.

L.S. Phalanges of Human foetus, about 9 weeks

Intracartilaginous ossification

L.S. Femur or Humerus, human, about 9 weeks

T.S. Femur, human, decalcified

L.S. „ „ „

T.S. Metacarpal bone, decalcified

T.S. Femur, hard ground, 2s. 6d.

L.S. „ „ „ 2s. 6d.

Intramembranous ossification.

Red marrow

DIGESTIVE SYSTEM.

SMALL INTESTINE—Injected

Trans. Sect., showing Villi

Sect. of Surface

Appendix, Vermiform normal T.S.

Large Intestine with Lieberkuhn's Glands, T.S.

Rectum, V.S.

Watson's "Service" Microscope, set A3063 $\frac{3}{4}$ " and $\frac{1}{2}$ " Objectives, two Eyepieces, Abbe condenser, triple nosepiece. Price £20, is the outfit for the Medical Student.

DESIGN.

EFFICIENCY.

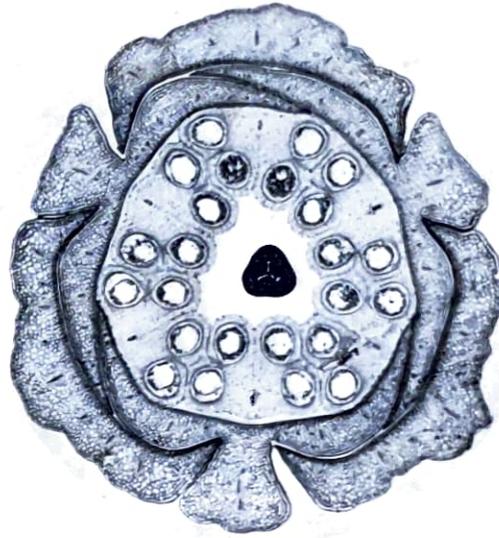


RELIABILITY.

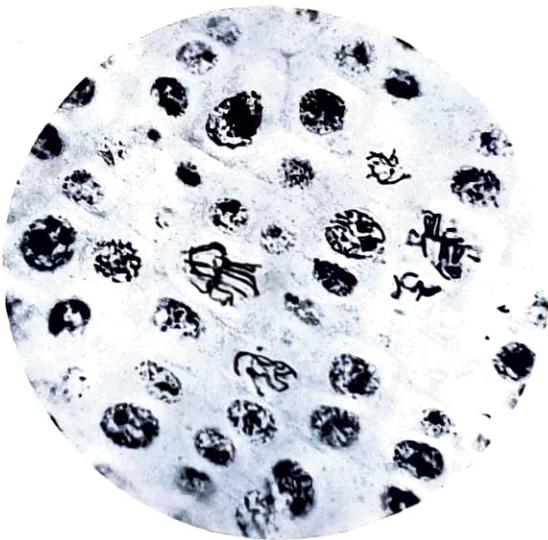
QUALITY.



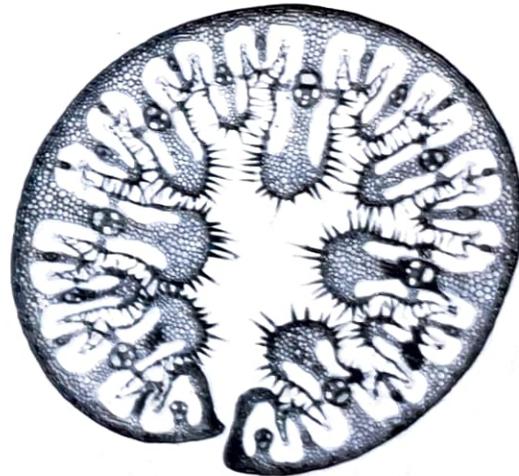
Stinging hairs on leaf of Nettle.



Flower Bud of Lily.
Trans. sect.



Mitosis in Root Tip.



Leaf of Marram Grass.
Trans. sect.

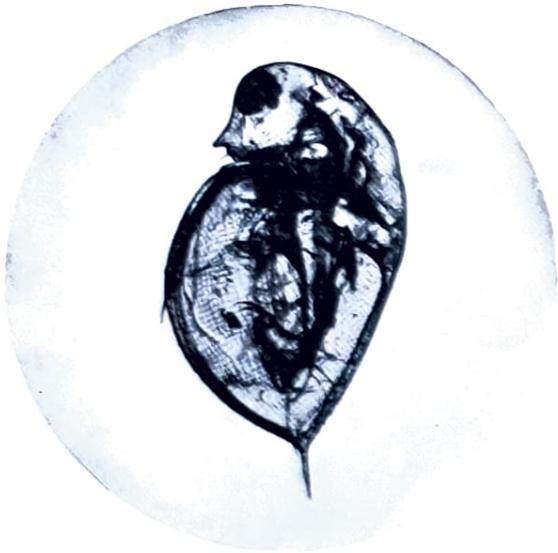
DESIGN.

EFFICIENCY.



RELIABILITY.

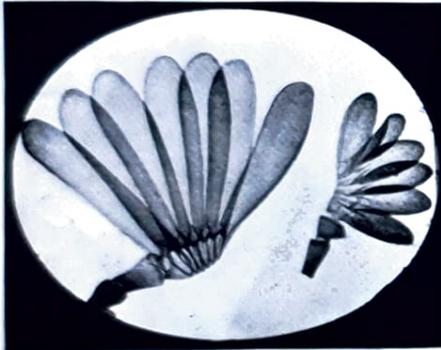
QUALITY.



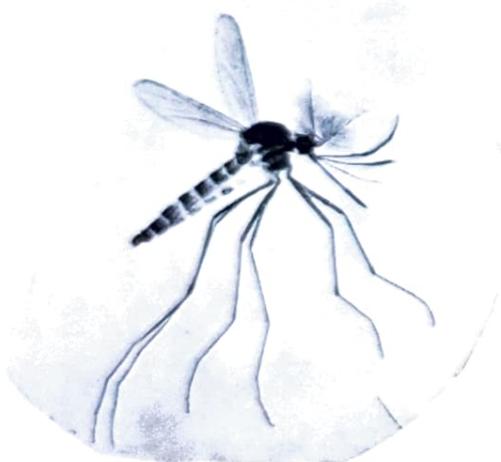
Water Flea, *Daphnia pulex*.



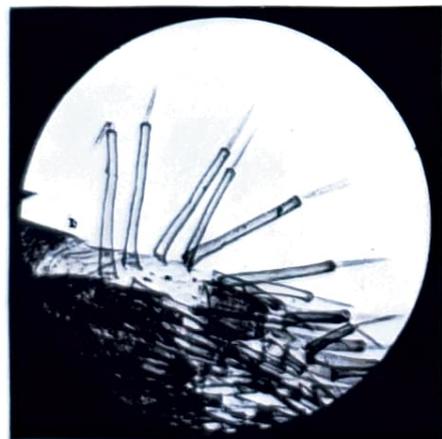
Human Flea, male. *Pulex irritans*.



Antennae of male and female Cockchafers.



Gnat, male. *Culex pipiens*.



Spinneret of Spider.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

FORAMINIFERA AND RADIOLARIA.

Photo-micrographs of slides taken from stock.



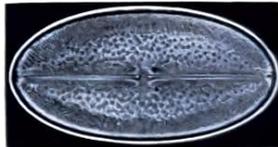
Circular Group of Selected Foraminifera from Moravia.

Price per slide, 10s.

See also page 317.

These slides are very effective when viewed either by transmitted light or by dark ground illumination, and are therefore very suitable for exhibition purposes

Selected Diatom :—
Navicula praetexta.



Group of interesting forms of Radiolaria from Barbados.

Price per slide, 10s.

See also page 317.



DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

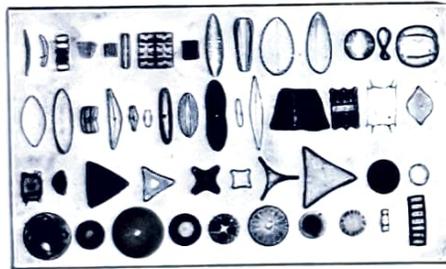
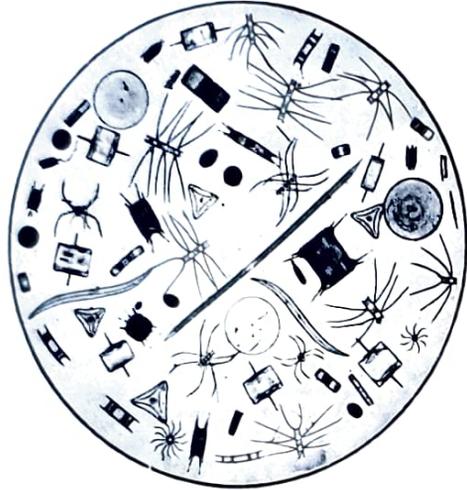
DIATOMACEAE.

Photo-micrographs of slides taken from stock.

Group of Marine
Plankton-Diatoms
from the Indian Ocean.

Price per slide, 15s.

Other slides listed on page 318.



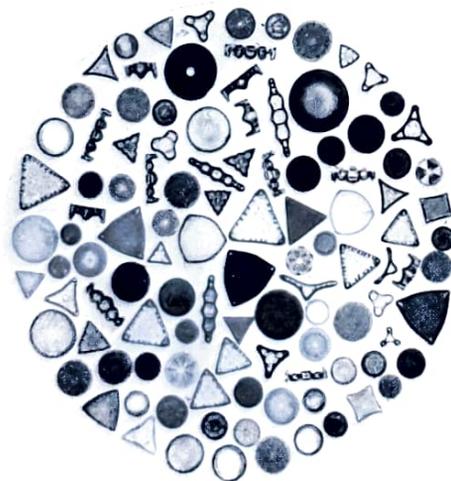
Type slide of 50 Diatoms.

See page 314.

Circular Group of Diatoms from
Oamaru, New Zealand.

Price £1 0 0

For particulars of similar slides
from other localities, see page 315.



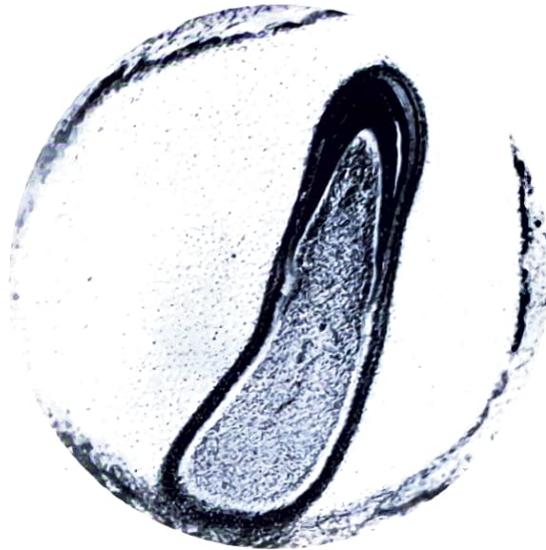
DESIGN.

EFFICIENCY.

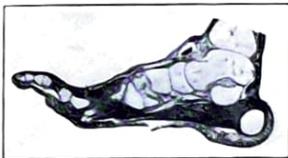


RELIABILITY.

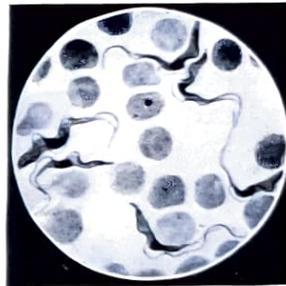
QUALITY.



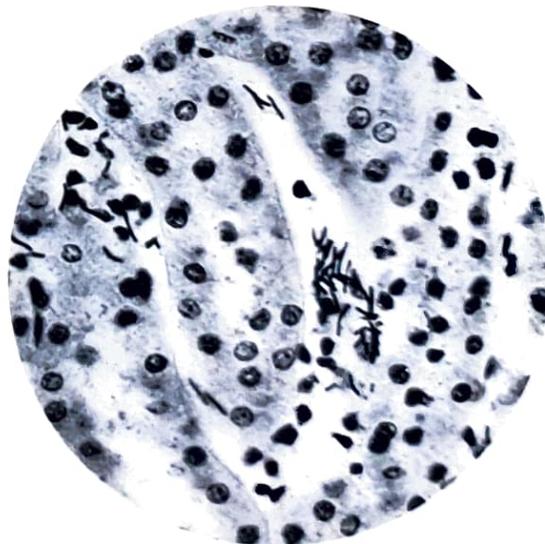
Developing Tooth, *in situ*. Vert. sect.



Human Foetal Foot, Long Section.



Trypanosoma gambiense in blood.



Bacillus Anthracis, in section of kidney.

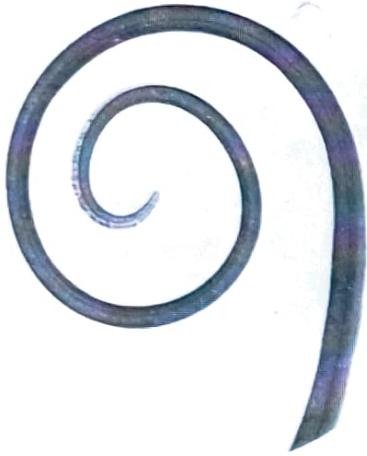
DESIGN.

EFFICIENCY.

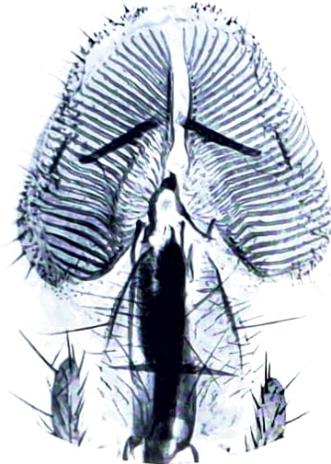


RELIABILITY.

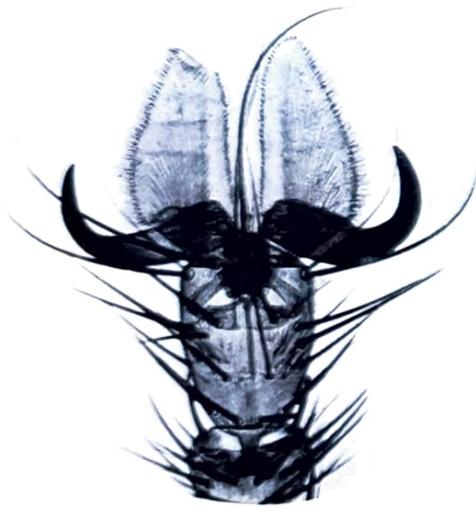
QUALITY.



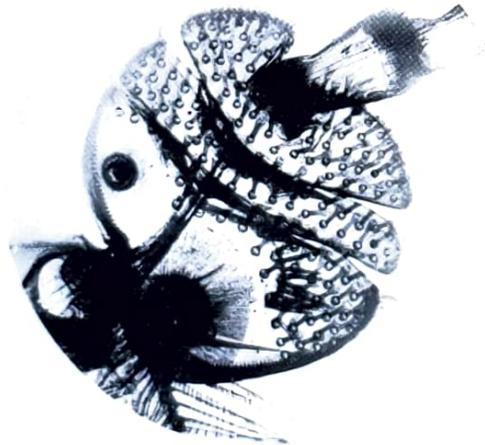
Tongue of Butterfly.



Proboscis of Blow Fly,
Calliphora vomitoria.



Foot of Blow Fly,
Calliphora vomitoria.



First leg of Male Water Beetle,
Dytiscus marginalis,
showing suckers.

DESIGN.

EFFICIENCY.

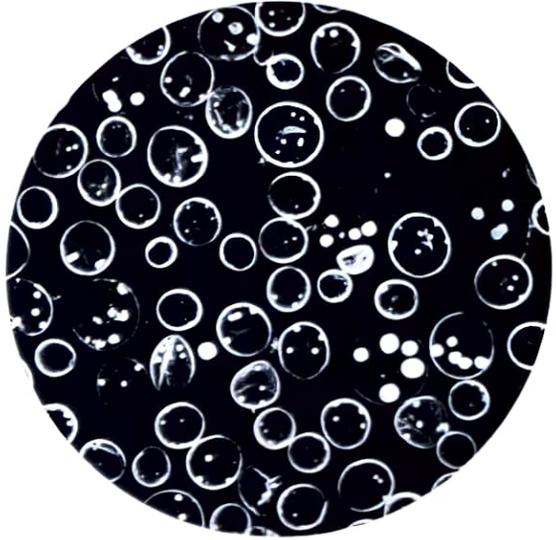


RELIABILITY.

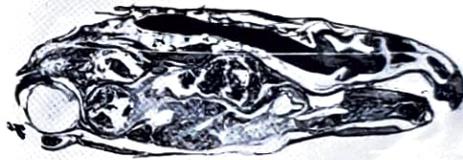
QUALITY.



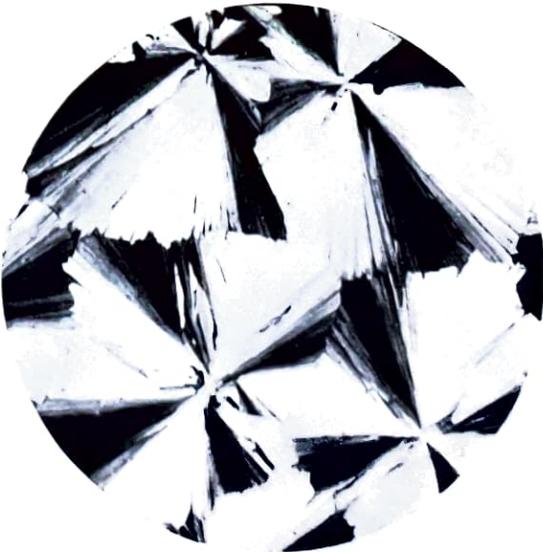
Human Femur. Trans. sect.



Volvox globator.



Young Frog, Long Sect.



Salicine by Polarised light.



Skin of Dover Sole.

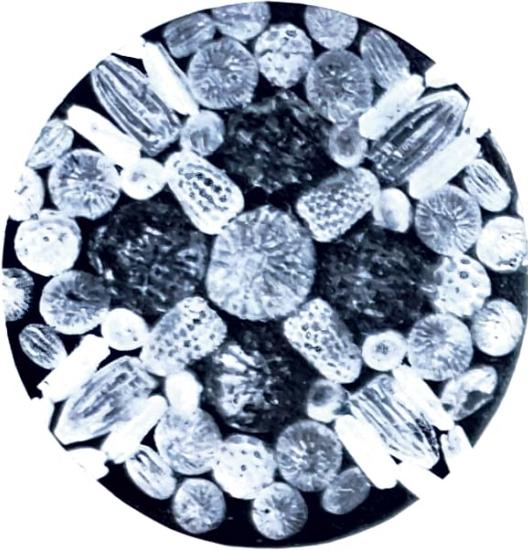
DESIGN.

EFFICIENCY.



RELIABILITY.

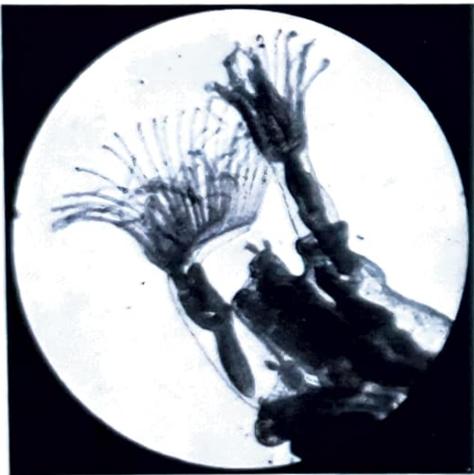
QUALITY.



Group of Eggs of Butterflies and Moths.



Freshwater Polyzoa.
Cristatella mucedo.



Freshwater Polyzoa.
Lophopus crystallinus.



Leaf of Sundew. *Drosera rotundifolia*.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

HISTOLOGY, HUMAN

(Continued).

Digestive System—Continued.

- Duodenum, Trans. Sect.
- Esophagus, Trans. Sect. stomach junction
- STOMACH—**
 - Cardiac Glands, Hor. Sect.
 - Pyloric Glands, Hor. Sect.
 - Injected preparation
- TONGUE—Injected**
 - Fungiform Papillæ
 - Filiform Papillæ
 - Circumvallate Papillæ
- LIP—**Showing transition of Skin to Mucosa
- Liver, stained
- Liver, injected
- Cells, isolated
- Gall Bladder
- Bile Duct, Trans. Sect.
- Pancreas, stained, showing Islets of Langerhans
- Spleen, stained, showing Malpighian Corpuscles
- TEETH—Normal, 2s. 6d. each.**
 - V.S. Developing Tooth in jaw of human foetus
 - T.S. Developing Tooth in jaw of human foetus
 - V.S. Developing Teeth in snout of foetal cat
 - T.S. Human Tooth with pulp *in situ*
 - L.S. " " " "
 - T.S. Root of Human Tooth with pulp, *in situ*
 - V.S. Molars of young rabbit, showing odontoblasts and ameloblasts
 - L.S. Incisors of young rabbit
 - V.S. Molars of rabbit six weeks old, *in situ*
 - T.S. crown of Human Tooth, hard ground, 3s. 0d.
 - L.S. Human Tooth, hard ground, 3s. 0d.
- PATHOLOGICAL—**
 - T.S. Human Tooth, pulp, *in situ*, showing caries
 - L.S. Human Tooth, pulp, *in situ*, showing caries
 - T.S. Enamel nodules
- URINARY ORGANS—**
 - Bladder, Trans. Sect.
 - Kidney, stained
 - Kidney, injected
 - Urethra, Trans. Sect.

REPRODUCTIVE SYSTEM.

- MALE GENERATIVE ORGANS—**
 - Seminal Vesicles
 - Glans Penis, Trans. Sect.
 - Testicle, Trans. Sect.
 - Epididymis, Trans. Sect.
 - Vas deferens, Trans. Sect.
 - Spermatozoa
 - Prostate gland, Trans. Sect.

Reproductive System—Continued.

- FEMALE GENERATIVE ORGANS—**
 - Uterus, Cervix, showing Mucosa
 - Vagina, showing Rugæ
 - Clitoris, Vert. Sect.
 - Clitoris, Trans. Sect., Nymphæ
 - Mammary Gland, active
 - " " passive
 - Placenta, Trans. Sect.
 - Ovary, Graafian follicles, T.S.
 - " corpora lutea, T.S.
 - Fallopian tube, Trans. Sect.

EMBRYOLOGY.

- Eye of Fœtus, Vert. Sect., 3s. 6d.
- Whole Human Fœtus, Long. Sect., from 2s. 6d.
- Hor. Sect., Entire Foot, 3s. 6d.
- Vert. Sect., Entire Foot, 3s. 6d.
- Vert. Sect., Entire Hand, 3s. 6d.
- Hor. Sect., Entire Hand, 3s. 6d.
- Vertebrae centres of ossification, 1s. 9d.
- Human Toe, Vert. Sect. through Nail, 1s. 9d.
- Human Tibio-Fibulae joint (Fœtus), 1s. 9d.
- Jaw, showing developing tooth, 2s. 6d.
- Umbilical Cord, Trans. Sect.
- SKIN—Hor. Sect., from Adult**
 - Vert. Sect., showing Perspiration Ducts and Pores
 - Vert. Sect., Human Foot, deep and external layers, differentiated
 - Injected
 - Negro showing Pigment Cells
 - Finger Tip, showing Nail and Matrix
 - Scalp, Vert. Sect.
 - Scalp, Hor. Sect.

- MUSCLE—**
 - Involuntary Fibres separated
 - Voluntary Fibres separated
 - Voluntary, Transverse Section, injected

- SALIVARY GLANDS—Mucous, Sublingual,**
 - Serous-Parotid
 - Mixed, Submaxillary
 - Tonsil, Vert. Sect.
 - Lymphatic Gland, Trans. Sect.
 - Thymus Gland, Trans. Sect.
 - Thyroid Gland, Trans. Sect.
 - Supra-renal Gland, Trans. Sect.
 - Mammary Gland, passive, Trans. Sect.
 - " " active, Trans. Sect.
 - Prostate Gland, Trans. Sect.

- DUCTLESS GLANDS—**
 - Supra-renal Pineal Body, T.S.
 - Pituitary

WATSON'S High Power Binocular Body relieves eyestrain.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

HISTOLOGY, HUMAN

(Continued).

URINARY DEPOSITS, each 1s. 6d.

Carbonate of Lime—Human
 " " from horse
 Chloresterin
 Creatin
 Creatinin and Chlor. Zinc
 Cystine
 Diabetic Sugar
 Hippuric Acid—Human
 Hippuric Acid from horse
 " " re-crystallized
 Murexide
 Phenyl—lactosazone
 " glucosazone
 " maltosazone
 Triple Phosphate—Prisms
 " " with Stellite Phosphate
 of Lime
 Tyrosin
 Taurin
 Urates
 Urea
 .. Nitrate
 .. Oxalate of
 Uric Acid—Aigrettes. Groups.
 " " Gouty. Rhombs.

Series 78.—Set of 12 typical Urinary Deposits, in Case, £0 18s. 0d.

NORMAL HISTOLOGY OF CENTRAL NERVOUS SYSTEM.

BRAIN—Cerebrum, stained
 .. injected
 Cerebellum, stained
 Pons varolii
 Medulla oblongata
 Demonstration of Myelin Sheath, Weigert
 Pal method, 2s. 6d.
 Somatic nerve endings, 2s. 6d.
 SPINAL CORD—
 Cervical region, Trans. Sect., stained
 " region, Long. Sect., stained
 Thoracic region, Trans. Sect., stained
 Lumbar region, Trans. Sect., stained
 Sacral region, Trans. Sect., stained
 Spinal Ganglion, Long. Sect.
 Nerve Fibres, medullated
 Nerve Fibres, non-medullated
 T.S. Nerve Trunk
 Sense Organs, Tactile-Corpuscles in skin
 " " Olfactory Bulb
 " " Pacinian Body,

HISTOLOGY OF FROG.

1s. 9d. each unless otherwise stated.

Artery
 Bladder
 Bone, L.S. Bone, T.S.
 Blood
 Cartilage
 Brain Cerebellum, Cerebrum
 Medulla oblongata, T.S.
 Mid brain, L.S.
 Optic Lobe, brain
 Ciliated Epithelium
 Columnar Epithelium
 Eye, Vert. Sect., 2s. 6d.
 Gall Bladder, Trans. Sect.
 Head (Triple Stained), 2s. 6d.
 Heart
 Intestine, small
 .. large
 Kidney
 Liver
 Lung
 .. injected
 Truncus arteriosus, T.S.
 Young Frog, L.S., 2s. 6d.
 Mesentery
 Muscle, Voluntary, T.S.
 .. Involuntary
 Nerve Fibres
 Esophagus, Trans. Sect.
 Ova
 Oviduct, Trans. Sect.
 Pancreas, " "
 Sec. of Upper Jaw with teeth, *in situ*, 2s. 6d.
 Skin
 Spleen
 .. injected
 Stomach
 Spermatozoa
 Spinal Cord, Trans. Sect.
 Testicle, T.S.
 Thyroid, Trans. Sect.
 Tongue, " "
 Tympanum, 3s. 0d.
 Ureter with Vesicula seminalis
 Vein
 Vertebrae
 Set of Slides, illustrating Frog as listed,
 in Oak Tray Case, £4 8s. 0d.

Explanatory Photograph of Eye of Frog, add 6d.

WATSON'S † in. Oil Immersion Objective N.A. 0.94, ideal for advanced Histology, Hæmatology, and for Darkground illumination. Price, £5 10s. 0d.

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

HISTOLOGICAL.

LOWER ANIMALS.

Set of 12 Slides showing Development of Frog. In Case, £1 12s. 6d.

1 Ovum of Frog, Two cell stage	7 Ovum of Frog, Medullary folds forming
2 " " Eight cell stage (four seen)	8 " " Medullary folds closing
3 " " Early segmentation	9 " " Medullary folds closed
4 " " Late segmentation	10 Tadpole, Trans. Sect., developing Eye
5 " " Dorsal lip	11 " Trans. Sect., developing Ear
6 " " Blastophore	12 " Trans. Sect., Kidney

1s. 9d. each, unless otherwise marked.

TEETH—

In situ in jaw of Cat, 2s. 6d.
In situ in upper jaw of Frog, 2s. 6d.
 Tooth of Dog, longitudinal hard section, ground, 2s. 6d.
 " " transverse hard section, ground, 2s. 6d.
 See also page 337.

HEAD AND EYES—Transverse section of

Crab, 3s. 0d.
 Pigeon showing Newt, 2s. 6d.
 Pectern, 3s. 0d. Squid, 2s. 6d.
 Canary, 2s. 6d. Dogfish, 2s. 6d.
 Eye of Crayfish, Long. Sect., 2s. 6d.
 Cuttlefish, Trans. Sect., 2s. 6d.

Ligamentum nuchæ from Ox, T.S.

" " " L.S.

" " " Teased

Lamprey, Trans. Sect., various regions on separate slides

Young Newt, Head and Thorax, Trans. Sect., 2s. 6d.

Fœtal Cat, Long, Sect., 3s. 6d.

Newly-born Mouse, triple stained, L.S., 3s. 6d.

" " Trans. Sect., Head, 2s. 6d.

Fœtal Calf, Trans. Sect., Nose, 2s. 6d.

Fœtal Rabbit, Long. Median Sect. 2s. 0d.

Ovary of Rabbit, T.S.

SERIES 55.—EMBRYOLOGY OF CHICKEN.

6 Slides illustrating Development of Chicken. In case, £1 5s. 0d. showing 24, 36, 48, 60, 72 and 84 hours' incubation. Separate Slides, 5s. each.

ENTOZOA.

2s. 0d. each, unless otherwise marked.

Difficulty is sometimes experienced in obtaining material for some of these preparations. It is therefore desirable that as much latitude as possible be given when ordering.

Ankylostoma duodenale, Male or Female, each 3s. 0d.

Ova of Anchylostoma duodenale

Necator americanus, Male or Female, 3s. 6d.

Ova of Schistosoma sinensis, 3s. 0d.

Sheep Fluke Fasciola lanceolata, 2s. 6d.

" " hepatica, 2s. 6d.

Fasciola hepatica, Trans. sects.

Eggs of Fasciola hepatica

" Tœnia Solium

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Head of Tœnia solium

Segment of Tœnia Solium

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MEMBRANE.**

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 Condyloma
 Squamous cell epithelioma, initial stage
 Squamous cell epithelioma, lobulated
 Papillary epithelioma of cheek
 Squamous cell epithelioma
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 Cylindroma
 Sebaceous gland epithelioma
 Sudoriparous gland epithelioma
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 Melanocarcinoma
 Melanosarcoma
 Naevus

BREAST.

Acute mastitis
 Tuberculosis of mammary gland
 Chronic cystic mastitis with beginning
 carcinoma
 Adenofibroma
 Intracanalicular adenofibroma
 Carcinoma of breast (exocrine type)
 Colloid carcinoma (endocrine type)
 Carcinoma of breast (medullary)
 Scirrhus carcinoma
 Sarcoma of breast

GASTRO-INTESTINAL TRACT.

Actinomyces of tongue
 Tuberculosis of tongue
 Carcinoma of tongue
 Sarcoma of tonsils
 Carcinoma of œsophagus
 Gastric ulcer
 Chronic intestinal and atrophic gastritis
 Carcinoma of stomach, intestinal type
 Colloid carcinoma of pylorus
 Carcinoma of stomach
 Duodenal ulcer
 Peptic ulcer of jejunum
 Acute suppurative appendicitis, perforating
 Tuberculous appendicitis
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 Colloid carcinoma of large intestine

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 Chronic passive congestion (nutmeg liver)
 Chronic passive congestion (red atrophy)
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 Yellow atrophy (sclerosis)
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 Scarlet fever
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 Syphilitic gumma of liver
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 Fatty cirrhosis
 Cirrhosis with beginning carcinoma
 Bile duct carcinoma
 Amyloid liver
 Polycystic liver
 Echinococcus cyst
 Adeno-carcinoma of gall bladder
 Carcinoma of common duct

PANCREAS.

Sclerosis of pancreas
 Congenital syphilis
 Pancreas in diabetes
 Cyst of pancreas
 Primary carcinoma (head of pancreas)

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 Amyloid tumour of larynx
 Epithelioma of larynx
 Diphtheria of trachea
 Croupous Pneumonia of lung
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 2nd stage, Red hepatization
 3rd stage, Grey hepatization
 Sarcoma of lung
 Wall of tuberculous cavity
 Tubercular granulation in acute Phthisis
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(Continued).

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 Spleen
 Liver

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 Liver
 Bone marrow
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 Tuberculosis of spleen
 Amyloid spleen

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 Polycystic kidney
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 Adenoma of kidney
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 Embryonic sarcoma
 Papilloma of bladder

MALE GENERATIVE ORGANS.

Fibrosis of testicle
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 Gumma of testicle
 Mixed tumour of testicle
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 Carcinoma of prostate
 Carcinoma of glans penis
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NERVOUS SYSTEM.

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 Tuberculous meningitis
 Syphilitic meningitis
 Glioma

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 Sarcoma
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 Myxoma
 Hyperplastic angioma
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 Osteoma
 Glioma
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(Continued).

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| 3 Fibroma | 15 Scirrhus. Cancer |
| 4 Enchondroma | 16 Encephaloid |
| 5 Osteoma | 17 Skin, Inflamed |
| 6 Myoma | 18 Muscle " |
| 7 Lymphoma | 19 Artery, Atheroma |
| 8 Papilloma | 20 Spinal Cord, Severe Fracture |
| 9 Adenoma | 21 Testicle, Syphilitic |
| 10 Sarcoma, Round-celled | 22 Liver, Syphilitic Gumma |
| 11 " Spindle-celled | 23 Kidney, Inflamed |
| 12 " Myeloid | 24 Liver, Cloudy Swelling |

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" swine fever	Pulex irritans, sexes
" tetanus	Pediculus vestimenti
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Desmids, Micrasterias	" pubis
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Infusoria, Ceratium tripos	Pneumococcus
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Gonococcus in Pus	Sheep Tick
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(continued).

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Nettle. *Urtica dioica*

Stem. Trans. or Long. Sects.

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 " " *olitorius*
 " *Bimlifatum*, *Hibiscus cannabinus*,
 (Indian)
 Nettle, *Urtica dioica*

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 Sunn Hemp, *Crotolaria juncea* (Bengal)
 Agave rigida, *Sisal*
 Bowstring Hemp, *Sansevieria fibre*
 Aloe or Maguey Hemp, *Agave americana*
 Ceba Hemp (Manilla), *Musa textilis*
 Mauritius or Cuban Hemp, *Fourcroya*
cubensis
 Ramie—Rhea or China grass—*Boh-*
meria tenacissima
 Pita fibre, *Bromelia magdeline*
 Pineapple fibre, *Ananas sativa*
 Coir—Cocoanut fibre—*Cocos nucifera*
 Istle—Tampico fibre—*Agave hetero-*
cantha
 Raphia fibre, *Raffia ruffia*
 Lace Bark fibre, *Lagetta lintearia*
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 Variety of Kapok, Bombax or Vege-
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 "Celta" Tubular Rayon (Viscose)
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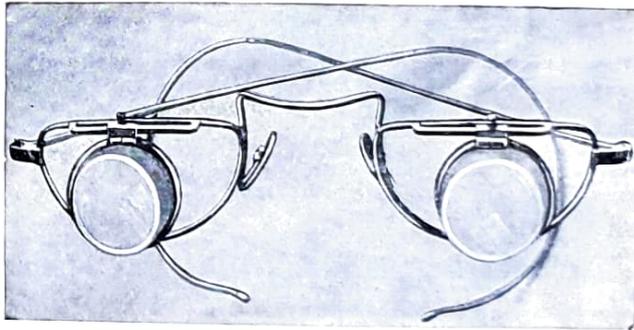
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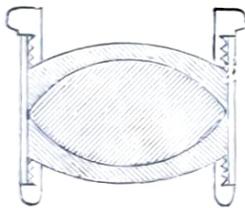
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35604-7.



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DESIGN.

EFFICIENCY.



RELIABILITY.

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MAGNIFIERS

(continued).

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35708



35604A



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Fuchsine Acid	-	1/-	1/10	3/6	Safranin O.	-	1/-
Gentian Violet 50% Dextrin	1/6	2/9	5/6	5/6	Soluble Blue with Dextrin	1/-	1/10
Gentian Violet, extra	1/6	2/9	5/6	5/6	Soluble Blue Extra	-	1/9
Indigo Carmine	-	1/6	2/9	5/6	Spirit Blue	-	1/6
Jenners Stain	-	3/9	-	-	Sudan II	-	1/6
Light Green	-	1/3	2/3	4/6	Sudan III	-	1/6
Malachite Green	-	1/-	1/10	3/6	Sudan IV	-	1/6
Martius Yellow	-	1/3	2/3	4/6	Thionine	-	3/6
Methyl Blue	-	1/6	2/9	5/6	Thionine Blue	-	2/-
Methyl Green	-	2/-	3/9	7/6	Toluidine Blue	-	2/3
Methyl Violet	-	1/-	1/10	3/6	Vital Red, 1 gm. 2/3	-	10/-

NATURAL DYESTUFFS AND COMPOUND STAINS.

	5 gms.	10 gms.	25 gms.		5 gms.	10 gms.	25 gms.
Aniline Blue, Orange G.	-	-	-	Haemalum	-	1/-	1/10
Mallory	1/6	2/9	5/6	Haematin, 1 gm. 1/6	-	6/-	11/9
Azure II, Eosine 1 gm. 2/-	9/-	17/9	35/6	Haematoxylin	-	3/-	5/-
Brazillin, 1 gm.	1/9	7/6	14/9	Leishman's Stain	-	3/9	7/3
Carbol Fuchsine	-	1/-	1/10	Methyl-Green-Pyronin (Papp-	-	-	-
Carbol Gentian Violet	-	1/-	1/10	enheim)	2/3	4/3	8/6
Carmalum	-	1/6	2/9	Orcein, 1 gm. 3/-	-	14/-	26/-
Carmine, Alum Soluble	1/9	3/3	6/6	Phlorogucinol Pure	-	3/6	6/9
Carmine, Borax Soluble	1/9	3/3	6/6	Planese 11-lb. Stain	-	1/-	1/10
Carmine, Picro-magnesia	3/-	5/9	11/6	Picro-Indigo-Carmine	-	1/-	1/10
Carmine Acid, 1 gm. 2/-	9/-	17/9	35/6	Romanowsky	-	3/9	7/3
Ehrlich's Acidophilous Mix-	-	-	-	Tetrachrome MacNeal 1	-	-	-
ture	2/-	3/9	7/6	gm. 1/3	-	5/-	9/9
Ehrlich-Biondi-Heidenhain-	-	-	-	Van Gieson	-	1/-	1/10
Triple Stain	1/6	2/9	5/6	Weigert's Elastic Stain Sol-	-	-	-
Ehrlich's Triacid Stain	1/6	2/9	5/6	uble	4/-	7/6	15/-
Giemsa, 1 gm. 2/-	9/-	17/9	35/6	Wrights	-	3/6	6/9
Gram's Iodine	-	1/-	1/10	3/6	-	-	-

PRICE LIST OF STAIN SOLUTIONS.

	25 c.c.	100 c.c.		25 c.c.	100 c.c.
Albert's Diphtheria Stain No. 1	1/3	2/9	Carmine:—	-	-
Albert's Diphtheria Stain No. 2	-	1/-	Alum Acetic	1/3	2/6
Aniline Blue-Orange G, Mallory	1/3	2/6	Alum, Anderson	1/3	3/-
Biebrich Scarlet, Scott	1/3	2/6	Alum, Gronacher	1/3	2/6
Bismarck Brown in 40% Glycerol	1/3	3/-	Alum, Nayer	1/3	2/6
Bordeaux	1/3	2/6	Ammonia, Rancier	1/3	2/6
Carbol Fuchsine, Ziehl	1/3	2/6	Bests	1/6	2/6
Carbol Gentian Violet, Nicolle	1/3	2/6	Borax Alcoholic, Gronacher	1/6	4/-
Carbol Methylene Blue	1/3	2/6	Magnesia Stock, Mayer	1/3	3/-
Carbol Thionine, King	1/3	3/-	Paracarumine	2/6	7/6
Carbol Thionine, Nicolle	1/3	3/-	Picro, Rancier	1/3	3/-
Carmalum	2/-	1/3	Picro-magnesia	1/3	3/-
			Cochineal Alcoholic, Mayer's old	-	-
			Formula	2/-	6/6

DESIGN.

EFFICIENCY.



RELIABILITY.

QUALITY.

PRICE LIST OF STAIN SOLUTIONS

(continued).

	25 c.c.	100 c.c.		25 c.c.	100 c.c.
Cochineal Alcoholic, <i>Mayer's New Formula</i> - - - - -	2/-	6/6	Methyl Violet - - - - -	1/3	2/6
Congo Red - - - - -	1/3	2/6	<i>Methylene Blue</i> :—		
Ehrlich's Acidophilous Mixture - - - - -	2/-	6/6	Alcoholic Conc. - - - - -	3/6	10/6
Ehrlich-Biondi-Heidenhain Triple Stain - - - - -	1/3	3/-	Aqueous - - - - -	1/3	2/6
Ehrlich's Triacid Mixture - - - - -	1/6	3/6	<i>Carbol, see Carbol Methylene Blue.</i>		
Elastic Tissue Stain, <i>Weigert's</i> - - - - -	3/6	10/6	Eosin, <i>see Leishman's & Wright's stains.</i>		
Eosin Methylene Blue, <i>see Leishman's & Wright's Stains.</i>			Loeffler - - - - -	1/3	3/-
Eosin Yellowish, 1% aqueous - - - - -	1/3	3/-	Nissl - - - - -	1/6	5/6
Gentian Violet, Alcoholic Conc. - - - - -	3/6	10/6	Polychrome - - - - -	1/6	4/3
" " Alcoholic - - - - -	1/3	2/6	Terry - - - - -	1/6	6/-
" " Aqueous - - - - -	1/3	2/6	Unna - - - - -	1/3	3/-
" " Aniline Water, <i>Ehrlich</i> - - - - -	1/3	3/-	Nigrosine W.S. - - - - -	1/3	2/6
" " <i>Carbol, see Carbol Gentian Violet</i>			Nile Blue for fat, acid - - - - -	1/6	4/-
Giemsa's Stain - - - - -	2/6	7/6	Nile Blue for fat, neutralized - - - - -	1/9	5/-
Glycæumalum - - - - -	1/3	2/6	Orange G. - - - - -	1/3	2/6
Goodpasture's Stain - - - - -	2/-	6/-	Paracarmine, <i>see Carmine.</i>		
Gram's Iodine - - - - -	—	1/-	Pasini's Stain - - - - -	2/-	6/6
Hæmalum - - - - -	1/3	2/6	Pianese III b Stain - - - - -	1/3	3/-
Hæmalum Acid - - - - -	1/3	2/6	Picro-Indigo-carmine - - - - -	1/3	2/6
<i>Haematoxylin</i> :—			Romanowsky's Stain, <i>see Leishman's & Wright's Stains.</i>		
Acid, <i>Ehrlich</i> - - - - -	1/9	5/6	Safranin Alcoholic, <i>Babes</i> - - - - -	2/6	7/6
Delafield's - - - - -	1/3	2/6	" Aniline Water, <i>Babes</i> - - - - -	1/3	3/-
Phospho-Molybdic acid, <i>Mallory</i> - - - - -	1/3	3/-	" Aqueous - - - - -	1/3	2/6
Phospho-Tungstic acid, <i>Mallory</i> - - - - -	1/3	3/-	Scharlach R, <i>see Sudan IV.</i>	2/-	6/6
Unna's - - - - -	1/3	3/-	Sudan II Pyridine, <i>Proescher</i> - - - - -	2/-	6/6
Heidenhain No. 1, <i>Iron</i> - - - - -	1/3	2/-	Sudan III Alcoholic - - - - -	2/-	6/6
" No. 2 - - - - -	1/3	2/6	Sudan III Alkaline Alcohol, <i>Herzheimer</i> - - - - -	2/6	7/6
Held's Molybdic acid - - - - -	1/3	3/-	Sudan III Acetone-Alcohol, <i>Herzheimer</i> - - - - -	2/6	7/6
Weigert No. 1 - - - - -	2/-	6/-	Sudan IV Alcoholic - - - - -	2/-	6/6
" No. 2, <i>Iron</i> - - - - -	1/3	2/-	Sudan IV Alkaline-Alcohol, <i>Herzheimer</i> - - - - -	2/6	7/6
Indulin-Aurantia-Eosin, <i>see Ehrlich's Acidophilous Mixture.</i>			Sudan IV Acetone-Alcohol, <i>Herzheimer</i> - - - - -	2/6	7/6
Leishman's Stain - - - - -	3/6	10/6	Tetrachrome Stain, <i>MacNeal</i> - - - - -	2/6	7/6
Magenta Acid Aniline Water, <i>Altmann</i> - - - - -	1/3	3/-	Thionine Acetic, <i>Frost</i> - - - - -	1/3	3/-
Magenta Acid Aqueous - - - - -	1/3	2/6	Thionine Carbolic <i>see Carbol Thionine.</i>		
Magenta Basic Conc. Alcoholic - - - - -	3/6	10/6	Van Gieson's Stain - - - - -	1/3	2/6
Magenta Basic Collodion - - - - -	1/6	4/3	Vesuvium, <i>see Bismarck Brown.</i>		
Methyl Blue-Eosine, <i>Mann</i> - - - - -	1/3	2/6	Water-Blue-Orcin Unna - - - - -	2/6	7/6
Methyl Green - - - - -	1/3	2/6	Weigert's Elastic Stain - - - - -	3/6	10/6
Methyl Green-Pyronine, <i>Pappenheim</i> - - - - -	1/6	5/-	Wright's Stain - - - - -	3/6	10/-
Methyl Green-Pyronine, <i>Unna</i> - - - - -	2/3	7/-			

BURROUGHS WELCOME & CO.'S

"SOLOID" BRAND MICROSCOPIC STAINS.

(TRADE MARK)

"Soloid" Microscopic Stains will be found exceedingly useful for the rapid preparation of small quantities of Solution. Each tube contains 6 "Soloid" products.

A descriptive list, in each packet, gives full directions for making up and staining.

Price 1/1½ per packet, excepting those marked otherwise.

The following "Soloid" stains are obtainable :—

	s. d.		s. d.
Bismarck Brown, pure - - - - -	0.1 gm.	Hæmalum - - - - -	
Borax Methylene Blue - - - - -		Hæmatoxylin, pure - - - - -	0.1 gm.
Ehrlich Triple Stain - - - - -	1 8	Methyl Violet, pure - - - - -	0.1 gm.
Eosin, pure - - - - -	0.1 gm.	Methylene Blue - - - - -	0.1 gm.
Eosin-Azur (for Giemsa Staining) - - - - -	0.038 gm.	Neutral Red - - - - -	0.1 gm.
Eosin-Methylene Blue (Louis Jenner's Stain) - - - - -	0.05 gm.	Romanowsky Stain (Leishman's Powder) - - - - -	0.015 gm.
Fuchsin (Basic), pure - - - - -	0.1 gm.	Thionin Blue, pure - - - - -	0.1 gm.
Gentian Violet, pure - - - - -	0.1 gm.	Toison Blood Fluid - - - - -	
Gram's Iodine Solution - - - - -	15 c.c.	Toluidine, Blue - - - - -	0.1 gm.

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

MOUNTING MEDIA, ETC.

Code Word.	No.				s.	d.
Shoul	36101	Asphalt or Black Cement			1	6
Shout	36102	Bell's Cement		Per Bottle	4	6
Shove	36103	Canada Balsam, Natural			2	0
Shown	36104	" " in Benzole			2	0
Shred	36105	" " in Xylol			2	0
Shrex	36106	" " Bottle, with neck turned in so that rod can be scraped against edge, with glass rod, capacity about 2 ozs.			2	0
Siate	36107	Cedar Oil, for clearing			1	9
Shrew	36108	Cedar Oil, thick, for Immersion			1	0
Sibec	36109	Deane's Medium			1	0
Sicca	36110	Farrants' Medium			1	6
Sider	36111	Glycerine Jelly			1	0
Shrie	36112	Gold Size			1	0
Siflu	36113	Hyrax, a synthetic resin, N. 1-71 in Xylol; 1/2 oz. bottle 4 6.			1	6
Sikan	36114	Styrax, Oriental			6	6
Silva	36115	Styrax, American			2	0
Shril	36116	Marine Glue			5	0
Shrif	36117	Zinc White Cement			1	6
Shrof	36118	Clove Oil			2	0
Shrog	36119	Celloidin	25 grms.	100 grms.	500 grms.	
Shroh	36120	Celloidin Solution, Thick	8/-			
Shroj	36121	Celloidin Solution, Thin	3/-	11/-	44/-	
Shrok	36122	Dammar Mastic	2/-	7/-	28/-	
			1/-	2 6	10/-	
Shrol	36123	Euparal, 1 oz.	Pale.	Vert.		
Shrom	36124	Euparal Essence, 1 oz.	2/6	3/-		
Shron	36125	Flemming's Solution, Strong			1 6	
Shrop	36126	Flemming's Solution, Weak	3/6	12 6		
Shror	36127	Gum syrup for Freezing Microtome	2/6	9 3		
Shros	36128	Iodine, resublimed		2/6	10/-	
Shrot	36129	Oil of Cloves	2/-	7 3	28/-	
Shrov	36130	Osmic Acid 2%	1 9	4 6	18/-	
Shrow	36131	Osmic Acid, 1% solution	12 6	42 6		
		Paraffin Wax—	7/-	25/-		
Shrox	36132	Melting point about—				
		120° F. (49° C.) in 1 lb. blocks			1 6	
Shroy	36133	125° F. (52° C.) " "			1 8	
Shroz	36134	130° F. (54° C.) " "			1 8	
Shulm	36135	140° F. (60° C.) " "			2/-	
Shuvt	36136	Schulze Solution	1 3	3.-	12/-	

SOLID MEDIA (to order only)

Agar—acid lactose (pH 5-6)					
" —ascitic, 5 c.c. in phials					
" —Fildes' for B. influenzae, in phials	4 6	24.-		4/6	
" —glycerin, 6 c.c. in tubes	8.-	38.-			
" 10 c.c. for plating, in phials	4.-	22.-		4/6	
" —maltose (Sabouraud's), in phials only	5/-	28.-			
" —MacConkey's, in phials (10 c.c.)	4 4	24.-			
" and bottle	4 4	24.-			
" —nutrient, 6 c.c. in tubes	4/-	22.-		4/6	
" —nutrient with human blood (mixed or smeared), in phials	7/-	39.-		4/6	
" —Sabouraud's—vide supra, agar—maltose—serum, in phials	6/-	33.-			
" —tellurite, for B. diphtheriae, in phials	5/-	28.-			
" —whey (pH 6-8), in bottle				6.-	
Blood serum, Loeffler's, 5 c.c. in tubes	4/-	22.-			
" in phials	4 4	24.-			
Bordet's medium for B. pertussis (in plates on loan)	12.-				
Gelatin (nutrient), in tubes 6 c.c.	4.-	22.-		4/6	
" in phials	4 4	24.-			

CULTURE MEDIA.

	Per doz.	Per 1/2 gross.	Per 1/2 litre bottle.
Agar—acid lactose (pH 5-6)			
" —ascitic, 5 c.c. in phials			
" —Fildes' for B. influenzae, in phials	4 6	24.-	4/6
" —glycerin, 6 c.c. in tubes	8.-	38.-	
" 10 c.c. for plating, in phials	4.-	22.-	4/6
" —maltose (Sabouraud's), in phials only	5/-	28.-	
" —MacConkey's, in phials (10 c.c.)	4 4	24.-	
" and bottle	4 4	24.-	
" —nutrient, 6 c.c. in tubes	4/-	22.-	4/6
" —nutrient with human blood (mixed or smeared), in phials	7/-	39.-	4/6
" —Sabouraud's—vide supra, agar—maltose—serum, in phials	6/-	33.-	
" —tellurite, for B. diphtheriae, in phials	5/-	28.-	
" —whey (pH 6-8), in bottle			6.-
Blood serum, Loeffler's, 5 c.c. in tubes	4/-	22.-	
" in phials	4 4	24.-	
Bordet's medium for B. pertussis (in plates on loan)	12.-		
Gelatin (nutrient), in tubes 6 c.c.	4.-	22.-	4/6
" in phials	4 4	24.-	

LIQUID MEDIA (to order only)

Broth—acid lactose (pH 5-6), in phial and bottle	3 4	18.-	3/-
" —MacConkey's glucose, in phial (10 c.c.) and bottle	3 4	18.-	3/-
" —MacConkey's lactose, in phial (10 c.c.) and bottle	3 4	18.-	3/-
" —nutrient, in phial and bottle	3 4	18.-	3/-
" —Whey (pH 6-8), in bottle			4/-
Brilliant—green-bile enrichment medium, in phial 12 c.c.	3 6	18 6	
Bile (ox) in sealed tubes of about 10 c.c.	3 6		
Meat medium for B. acne and other anaerobes, in phial (15 c.c.)	4 4	24.-	
" (Ministry of Health's formula) in phial (15 c.c.)	4 4	24.-	
Milk (phenol red indicator) in phial and bottle	3 10	21.-	3/6
Peptone water with fermentation tube and acid fuchsin indicator, containing glucose, lactose, mannite, maltose or saccharose, in phials	4.-	22.-	
" do, containing dulcitol, in phials	5.-	27 6	
All the above can be supplied to order. Unless otherwise stated all are standardized to pH 7-8.			
Other media will be made to order or special formula (in quantities of not less than 2 dozen tubes or in bulk in 1/2 litre bottles)			
Sterilized plugged tubes	6.-	33.-	7/-
Sterilized phials	1 2	6.-	
	1 6	8/-	

DESIGN.

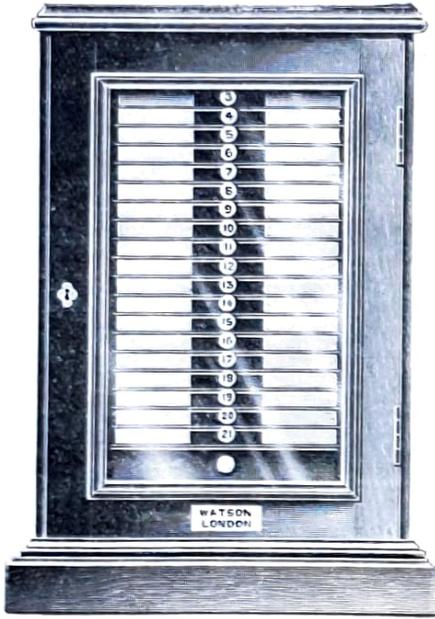
EFFICIENCY.



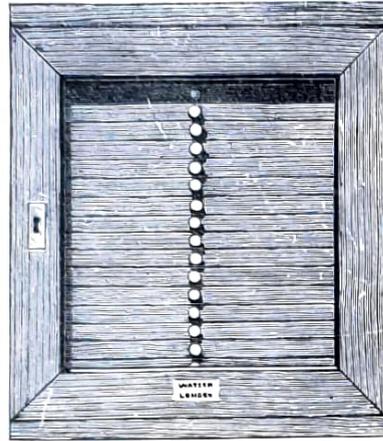
RELIABILITY.

QUALITY.

MICROSCOPIC OBJECT CABINETS AND BOXES.



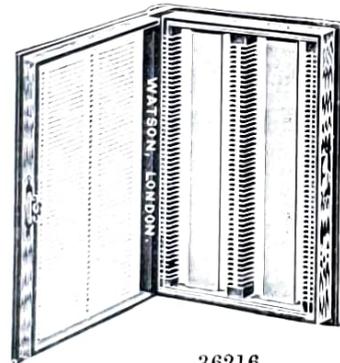
36205



36201

Estimates submitted for any size or style of cabinet, in any suitable wood, for any climate, with plain or metal bottom trays on receipt of enquiry or specification.

Code Word.	No.		£	s.	d.
Punie	36201	Neatly made Cabinet of polished pine, with glass door, lock and key to hold 200 objects, as figured	2	10	0
Punch	36202	Ditto, ditto, 500 objects	4	10	0
Punti	36203	Ditto, ditto, 1000 objects	7	15	0
Pupel	36204	Mahogany Cabinet of superior workmanship with mouldings top and bottom, to hold 280 objects, each drawer numbered, with an extra deep drawer for materials, etc.	10	0	0
Pupil	36205	Large handsome Mahogany Cabinet to hold 500 objects, each drawer numbered and furnished with porcelain plates, as figured	15	0	0
Puppy	26206	Ditto, ditto, to hold 1,000	21	0	0



36216

MICROSCOPE SLIDE BOXES.

Cloth-covered Cardboard Boxes, with drop fronts, white cardboard trays with linen-jointed flaps.

No.		£	s.	d.
36207	With 6 trays to hold 54 slides flat	3	0	
36208	" 12 " " 108 " "	5	6	
36209	" 16 " " 144 " "	6	9	

Polished Wood Object Boxes, with partitioned trays.

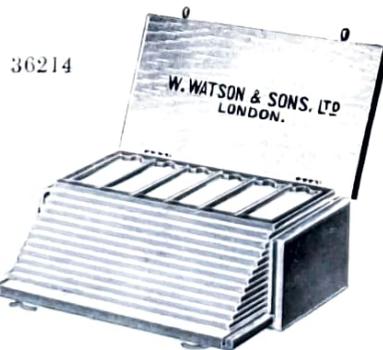
36210	To hold 1 dozen slides in 2 trays	3	0	
36211	" 2 " " 4 " "	4	0	
36212	" 3 " " 6 " "	6	0	
36213	" 4 " " 8 " "	8	0	
36214	" 6 " " 12 " "	11	0	
36215	" 12 " " 12 double trays	15	0	

Rack Boxes - The most convenient form for storing quantities of specimens for teaching or for those with restricted space.

36216	Cloth covered, book form, with index, for 100 slides	6	3	
36217	Black cardboard, with index for 100 slides	4	0	
36218	Wooden boxes, semi-polished, folding, with index, to hold 100 slides	4	0	

Folding Pocket Cases, flat.

36219	To hold 12 slides	2	9	
36220	To hold 6 slides	2	0	



36214

DESIGN. EFFICIENCY.



RELIABILITY. QUALITY.

CABINETS OF MICROSCOPIC OBJECTS.

COMPLETE FOR PRESENTATION, ETC.

Code Word.	No.		Prices.
			£ s. d.
Prope	36301	Handsome Mahogany Cabinet of finest workmanship and finish, containing 1000 objects of varied interest. Each specimen is a carefully selected example of the subject it typifies. Many novel and interesting preparations are included, Anatomical, Entomological, Zoological, etc., also many rare Diatomaceæ, Foraminifera and Radiolaria, forming a collection of the highest order, eminently suited for presentation. Each drawer has a tablet of its contents	97 10 0
Prose	36302	Handsome Mahogany Cabinet, equal to the above in every respect, but containing 500 objects	50 0 0
Pushé	36303	Mahogany Cabinet, as above, containing 280 objects, all carefully selected, including many novel and attractive slides for exhibition purposes, as well as a large number of rare specimens of Zoological interest, etc.	29 5 0
Prote	36304	The Student's Cabinet , of polished pine with glass door, lock and key, containing 200 preparations, illustrating Anatomy, Bacteriology, Pathology, Physiology, Urinary Deposits, etc.	22 10 0
Proud	36305	The Amateur's Cabinet containing 200 specimens of general interest—Botanical Sections, Crystals for Polariscope, Diatomaceæ, Entomological Objects, Foraminifera, Hydrozoa for Dark Ground Illumination, Soundings, all of the highest quality	18 10 0
Prove	36306	Pine Case, containing 72 objects of General Interest, all carefully prepared and selected	6 5 0

Other Microscopic Object Cabinets made to any size or pattern, and furnished with slides typical of any required subject.

EDUCATIONAL SERIES FOR STUDENTS.

BOTANY.

Prows	36307	Two sets of Typical Structures, the first being 24 Elementary Tissues, and the second illustrating the Comparative Anatomy of Plants. These have been adopted by the London County Council for use in their Technical Classes. Series 33 in case	£ s. d. 2 0 0
Prune	36308	" 35 "	2 1 6

EMBRYOLOGY.

Pryor	36309	Six slides, illustrating the development of a Chick, mounted in Canada Balsam, showing with great distinctness the nervous and circulatory system, etc., in case	1 5 0
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EXHIBITION SLIDES.

Pruce	36310	An attractive selection of 36 interesting objects, many of which are quite novel in character, including slides for Polariscope and Dark Ground Illumination	3 10 0
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GEOLOGY.

Pukeo	36311	Twenty-four Typical Rock Sections, sedimentary, metamorphic and igneous. The series will be found very useful for Petrological candidates for the B.Sc. degree	2 15 0
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PHYSIOLOGY.

Pulls	36312	Four complete sets (Nos. 67-73) each containing 24 Typical Tissues, each slide a selected example of its kind. The complete series illustrates the Standard Textbooks of Histology. Each set of 24, £2 2s. 0d. Per set of 96 in case	8 8 0
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PUBLIC HEALTH.

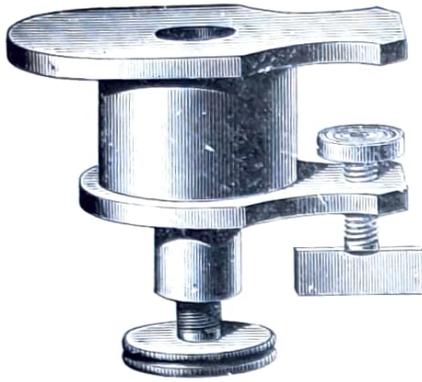
Pulse	36313	Seventy-two specimens, suitable for candidates for the Diploma, as approved by Dr. F. J. Allan and mentioned in his "Aids to Sanitary Science"	8 15 0
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ZOOLOGY.

Pumps	36314	Twenty-four selected specimens, Coelenterata, Infusoria, Polyzoa, Protozoa, Vermes, etc. Many of these, apart from their Biological interest, will be found of great interest as exhibition objects. In case	3 0 0
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DESIGN.	EFFICIENCY.		RELIABILITY.	QUALITY.
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MICROTOMES.



36401



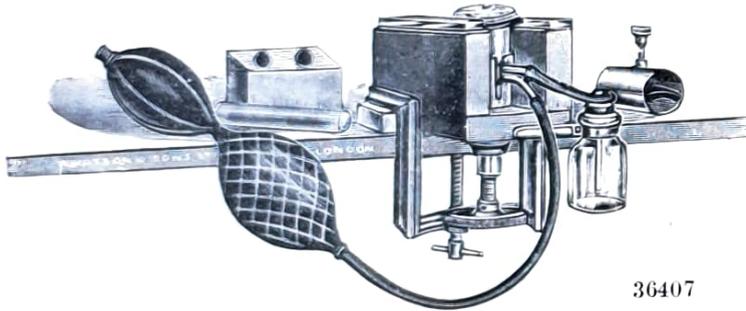
36405



36406

PRICES.

Code Word.	No.		£	s.	d.
Prawn	36401	Cole's Pattern Section-Cutter	-	-	-
Preac	36402	Set of Punches, complete in case, for cutting out embedding substances, extra	2	12	6
Pream	36403	Cole's Pattern Section-Knife, in case	0	8	6
Preal	36404	Razor, plano-concave	0	2	9
Prebo	36405	Hand Section-Cutter, for Botanical work	0	9	6
Preca	36406	Darlaston's Hand Section-Cutter	0	14	6



36407

THE CATHCART MICROTOME—Specially Recommended for Schools.

This popular form of microtome is fitted for Ether Freezing or Embedding. For freezing tissues it is arranged as shown above: to embed tissues the tubes, bottle and the freezing tube are drawn out, the latter being replaced by another tube, with clamp. The substance to be cut (embedded in paraffin or other medium) is then inserted, and the clamp screwed up. This instrument is thoroughly well finished, and the adjusting screw milled head is made specially large to permit a fine movement.

Code Word	No.		£	s.	d.
Prayl	36407	Microtome as above, with double clamp to fasten it to table, spray bellows and freezing apparatus, tubes for making paraffin blocks, etc., complete	2	0	0
Prels	36408	The above Instrument, arranged for Ether Freezing only	1	11	6
Prema	36409	Ditto, ditto, for Embedding only	1	10	0
Prepo	36410	Plane Iron Section Knife, in handle	0	8	6
Prest	36411	Ether Points, extra sets	0	4	6
Pride	36412	Rubber Spray Bellows	0	5	0
Prick	36413	Metal moulds, L-shaped for casting Paraffin blocks, per pair	0	4	0
Prime	36414	Elder Pith for Embedding, per bundle	0	0	9

Particulars of other Microtomes are given in Parts 1 and 2 of the catalogue.

DESIGN.	EFFICIENCY.		RELIABILITY.	QUALITY.
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- Parts 1 and 2. Student and Research Microscopes and Accessories.
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- Part 4. Metallurgical Microscopes and Accessories.
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- Part 6. Petrological Microscopes and Accessories.
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BOOKLET:

Microscopes for Students and Research.

JOURNAL:

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