

Cultures of Living Microorganisms and Preserved Botanical Material

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Living Cultures

B1101. Oscillatoria	B1114. Vorticella
B1103. Spirogyra	B1115. Mixed Protozoa
B1105. Elodea	B1116. Hydra
B1111. Amoeba	B1117. Rotifers
B1112. Euglena	B1118. Planaria
B1113. Paramecium	B1119. Small Annelid Worms
Unit	A B C
Sufficient for class of	10 25 100
Price each, per unit	\$1.00 1.50 5.00

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Preserved Material

- B1201. **Cyanophyceae:** (A) Anabaena, (B) Nostoc, (C) Oscillatoria, (D) Rivularia.
 B1203. **Chlorophyceae:** (A) Chara, (B) Cladophora, (C) Desmids, (D) Diatoms, (E) Oedogonium, (F) Pandorina, (G) Pleurococcus, (H) Spirogyra, (J) Vaucheria Geminata, (K) Vaucheria Sessilis, (L) Volvox.
 B1205. **Phaeophyceae:** (A) Ectocarpus, (B) Fucus, with Fruiting Tips, (C) Fucus, Antheridial Tips, (D) Fucus, Oogonial Tips.
 B1207. **Rhodophyceae:** (A) Polysiphonia, Antheridia, (B) Polysiphonia, Cystocarps, (C) Polysiphonia, Tetraspores.
 B1209. **Phycomycetes:** (A) Albugo, (B) Peronospora, (C) Plasmopara, (D) Rhizopus.
 B1211. **Ascomycetes:** (A) Ergot, (B) Lichens, Crustose, (C) Lichens, Foliose, (D) Lichens, Fruticose, (E) Peach Leaf Curl, (F) Peziza, (G) Microsphaera.
 B1213. **Basidiomycetes:** (A) Corn Smut, (B) Geaster, "Earth Star," (C) Mushrooms, (D) Oat Smut, (E) Puff Balls, (F) Rust, Gymnosporangium, (H) Rust, Wheat, Aecia, (J) Rust, Wheat, Telia, (K) Rust, Wheat, Uredinea.
 B1215. **Hepatica:** (A) Anthoceros, (B) Marchantia Thallus, with Antheridial Heads, (C) Marchantia Thallus, with Archegonial Heads, (D) Marchantia Thallus, with Sporophytes, (E) Marchantia Thallus, with Gemmae Cups, (F) Riccio-carpus Natans.
 B1217. **Musci:** (A) Mnium, Antheridial Plants, (B) Mnium, Archegonial Heads, (C) Mnium, with Sporophytes, (D) Moss Protonema, (E) Polytrichum.
 B1221. **Pteridophytes:** (A) Equisitum Arvense, Strobili, (B) Equisitum Arvense, Sterile Plants, (C) Fern Leaflets, (D) Fern, Prothallia, (E) Fern, Prothallia with young Sporophytes, (F) Fern, Rhizomes, (G) Lycopodium, (H) Selaginella.

Unit	A B C
Sufficient for class of	10 25 100
Price each, per unit	\$.60 1.25 4.50

In ordering give catalog number of group, letter of specimen and letter of unit.

Ask for complete list of live and preserved Botanical and Zoological Material

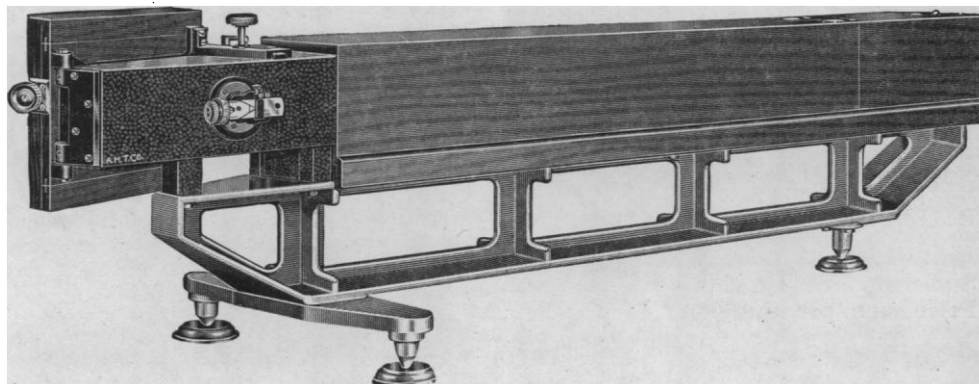
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SCIENCE

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THE GROWTH IN OPPORTUNITIES FOR EDUCATION AND RESEARCH IN PHYSICS DURING THE PAST FIFTY YEARS¹

By Sir J. J. THOMSON

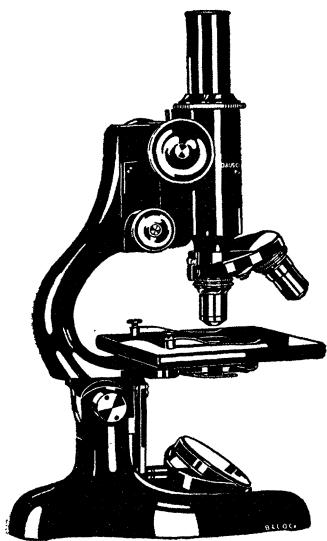
HONORABLE PROFESSOR OF PHYSICS, THE UNIVERSITY OF CAMBRIDGE AND THE ROYAL INSTITUTION, LONDON

DURING the last year we have lost by the death of Professor Albert Michelson a physicist whose work was of quite exceptional importance. The famous experiment known everywhere as the Michelson-Morley experiment has, since it is the basis of the theory of relativity, been largely responsible for the trend of physical thought during the present century. It is a very striking example of the great philosophical consequences which can result from what might seem the rather mechanical process of improving the precision of physical measurements; the importance of the experiment depended entirely on the accuracy of the measurements being great enough to detect with certainty changes amounting only to one part in a hundred million.

The additions to our knowledge of physical phe-

¹ Address of the president of Section A—Mathematical and Physical Sciences, British Association for the Advancement of Science, London, September, 1931.

nomena and the number of new ideas introduced into physics since the last anniversary meeting have been so great and cover such a wide range that it would be impossible in the time at our disposal to give an account of them which would be at all adequate or even intelligible to those not already acquainted with them. There are, however, advances of another kind of great importance to the progress of physics which lend themselves more readily to a less inadequate treatment in such an address as this. Such advances are the increase in the opportunities for teaching and research in physics caused by the foundation of many new laboratories, the increase in the attention paid to the teaching of physics in our schools, the endowment of research workers and the increase in the opportunities for these to obtain remunerative employment, the increased recognition of the importance of research in industry and last but not least the improvements



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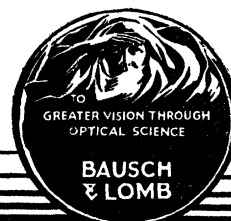
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