- 8. Stuffs dyed with such dyes.
- 9. A series of stuffs, dyed partly with Madder dyes, partly with artificially obtained Alizarine, and with other chemical productions, suited for comparisons, in addition to an opinion as to the prospects of Madder-industry by the continual improvements of these productions.
- NB. The Madders to which the above 9 questions refer, are those of the Levant, of Avignon, Naples, Russia, various parts of Netherland and some other part of the world.
- Adulterations of Madder, Samples for elucidation, and statement of the way in which these adulterations may be detected.
- 11. Plants furnishing colouring matters similar to Madder, with statement of whatever may relate to the culture and preparing of such dye stuffs, elucidated by dried specimens and samples.
- 12. A statistical review of the culture of Madder, and the trade in it during the last years.
- 13. A collection of writings about Madder, its culture and industrial appliances.
- 14. A complete Catalogue of such writings, also of those occurring in periodicals.
- 15. Coloured representations of the Madder-plant and roots, in the various stages of their development.

### 5. INDIGO.

#### Required:

- 1. Dried specimens of Indigo-plants (species and varieties), with productions obtained therefrom.
- 2. A statement of the manner in which these plants are reared and the dyes prepared.
- 3. Samples of the soils, in use for Indigo-growing.
- 4. Models and figures for illustrating the process of Indigo preparation.
- 5. Samples of dye-stuffs, obtained from Indigo alone, or from mixtures of Indigo with other dye-stuffs.
- 6. Stuffs dyed with such dyes.
- 7. A series of stuffs, dyed partly with Indigo-dye, partly with productions from coal-tar or other mineral substances, adapted for comparison. In addition, an opinion as to the prospects of the Indigo-business under the increasing competition of chemical dyes.
- NB. The descriptions of Indigo reverted to in the above seven queries, are those from Dutch India, British India, Central America, South America, Egypt, Africa, Western Asia, Southern Europe and any other region of the world.
- 8. Adulterations of Indigo, with samples of the articles used for that purpose, and a statement of the way in which such adulterations may be detected.
- 9. Other plants from which an approved blue dye can be obtained for manufacturing purposes, and cultivable on a large scale. An account of the culture of such plants and the preparation of the dye-stuff, elucidated by models, figures and samples.
- 10. A statistical review of the Indigo-culture and Indigo-trade of late years.
- 11. A collection of writings on the culture and preparation of Indigo.
- 12. A complete Catalogue of such writings; also of such as occur in periodicals.
- 13. Coloured representations of the Indigo-plant and its productions.
  - 6. CAOUTCHOUC (India Rubber) and GUTTA PERCHA.

## Required:

- 1. As complete a collection as possible of species of Asiatic Caoutchouc, with statement of the names of the plants from which, and the places whence derived.
- 2. As complete a collection as possible of species of African Caoutchouc, with statement of the names of the plants from which, and the places whence derived.
- 3. Idem of American Caoutchouc.
- 4. Caoutchouc from a definite district of Asia.
  - With statement of the name of the plant from which it is obtained.
- 5. Idem of Africa.
- 6. Idem of America.7. Objects made of pure Caoutchouc.
- 8. Fluid Caoutchouc, as it exudes from the tree, in white glass vessels.
- 9. Implements used for collecting and preparing Caoutchouc.
- 10. Samples of Gutta Percha, with statement of the name of the plant from which, and the place whence derived.
- 11. Dried flower-bearing and dried fruit-bearing branches of Caoutchouc yielding plants, if possible with the botanical and native appellation, and in each case with a sample of Caoutchouc therefrom.
- 12. Dried flower-bearing and dried fruit-bearing branches of plants yielding Gutta Percha, if possible with the botanical and vulgar name, and in each case with a sample of Gutta Percha obtained therefrom,

# 7. FATS (including Fatty Oils).

#### Required:

- 1. Fats of the family of the Musaceae (Ravenala amazonica [Guyana]).
- 2. Fats of the family of Palms (Euterpe oleracea [Para], Oenocarpus Bacaba [Para], Oenocarpus Patawa [Patawa], Oreadoxa oleracea and regia [Northern South America], Areca oleracea [Réunion], Manicaria saccifera [French Guyana], Livistona sinensis [Northern South America], Acrocomia sclerocarpa [Guyana], Astrocaryum vulgare [Guyana, Brazil], Astrocaryum acaule [Guyana], Scheelia Maripi [Guyana], Attalea Cohune [Guyana], Mauritia flexuosa [Guyana] Mauritia vinifera [Brazil], Sagus tedigera [Brazil], Elaeis guyneensis [West Africa], Cocos nucifera [India]).
- 3. Fats of the family of the Corylaceae (Corylus Avellara, Fagus sylvatica [both of Europe]).
- 4. Fats of the family of the Cannabineae (Cannabis sativa [Europe]).
- 5. Fats of the family of the Antidesmeae, (Putranjiva Roxburghii [West India].
- 6. Fats of the family of the Lauraceae (Tetranthera laurifolia [Java], Laurus nobilis [South of Europe], Litsaea sebifera [Java]).
- 7. Fats of the family of the Compositae (Helianthus annuus [Europe], and perennis [India], Guizotia oleifera [India], Madia sativa [Chili], Carduus pycnocephalus [Réunion], Carthamus tinctorius [Asia], Arctium Lappa [Europe, Asia]).
- 8. Fats of the family of the Oleaceae (Olea europaea [South of Europe]).
- 9. Fats of the family of the Apocyneae (Cerbera Thevetia [E. and W. India, South America], Whrightia antidysenterica [India]).
- 10. Fats of the family of the Gentianeae (Chironia cabrida [E. India]).
- 11. Fats of the family of the Labiatae (Ocymum Basilicum [Java], Ballota nigra [Europe]).
- 12. Fats of the family of the Solaneae (Nicotiana Tabacum, Atropa Belladonna [Wurtemberg]).
- 13. Fats of the family of the Bignoniaceae (Sesamum indicum and S. orientale [Asia, Africa], Paulownia imperialis [Japan]).
- 14. Fats of the family of the Sapotaceae (Argania Sideroxylon [Marocco], Lucuma mammosa [Tropic America]. Bassia Parkii [S. Africa], longifolia [India], latifolia [Bengal], butyracea [India], Djavé [Gabon], Njoungou [Gabon], Mimusops Elengi [Java], etc.)
- 15. Fats of the family of the Ampeliaceae (Vitis vinifera [South of Europe]).
- 16. Fats of the family of the Cornaceae (Cornus mas [Europe]).
- 17. Fats of the family of the Myristicaceae (Virola sebifera [Guyana], Myristica-species [Gabon, Brazil, W. Africa, the Moluccas, etc.]).
- 18. Fats of the family of the Anonaceae (Monodora grandiflora [Gabon]).
- 19. Fats of the family of the Ranunculaceae (Nigella sativa [India, Egypt]).
- 20. Fats of the family of the *Papaveraceae* (Papaver somniferum [Europe], Argemone mexicana [Bengal, E. India, America], Glaucium luteum [Europe]).
- 21. Fats of the family of the *Cruciferae* (Brassica campestris [Europe], Brassica Napus [Europe], Brassica sinensis [China], sorts of Sinapis [Europe, India], sorts of Thlaspi [Europe], Myagrum sativum [Europe]).
- 22. Fats of the family of the Cappariaceae (Cleome Viscosa [India]).
- 23. Fats of the family of the Bixaceae (Gynocardia odorata [India]).
- 24. Fats of the family of the Cucurbitaceæ (Cucumis Citrullis and other sorts [Africa, E. India, Brazil], Telfairea pedata S.E. & S.W. Africa], sorts of Momordica [America], sorts of Luffa [Asia], etc.)
- 25. Fats of the family of the Nhandirobeæ (Fevillia Marcgravii [Brazil], cordifolia [Venezuela] and other sorts).
- 26. Fats of the family of the Malvaceæ (Hibiscus cannabinus [E. India, Africa, America], Thespesia populnea [E. India, Ceylon, Tahiti], species of Gossypium [Europe, Egypt, U. States], Apeiba Titourbon [Venezuela]).
- 27. Fats of the family of the Sterculiaceæ (Pachira aquatica [Guyana, Antilles], Eiodendron anfractuosum [Tropical Asia], sorts of Bom bax [India], Sterculia foetida [Cape Verd Islands], and other sorts, Heritiera littoralis [Antilles], and other sorts [W. Africa]).
- 28. Fats of the family of the Buttneriaceae (Theobroma Cacao [S. America]).
- 29. Fats of the family of the *Ternstroemiaceae* (Cochlospermum Gossypium [India], Camellia oleifera [China]).
- 30. Fats of the family of the Dipterocarpeæ (sorts of Dryobalanops [Gabon], sorts of Hopea [Borneo]).
- 31. Fats of the family of the Clusiacea (sorts of Garcinia [India],