drum vulgare; *Woodsia hyperborea*; *W. ilvensis*. The paper was illustrated by specimens of the ferns.

V. *Remarks on the Cultivation of Cotton, Tea, and Fibrous Plants in India.* By WILLIAM JAMESON, Esq., Saharunpore. Communicated by Professor BALFOUR.

In a letter to Professor Balfour, dated 30th July 1862, Mr Jameson says:—"Much attention is now being paid to cotton cultivation in this country. I wish the British cotton lords to send out agents. They might get it not only of good quality but in any quantity. By recent returns furnished to Government by the different district collectors in the North-West Provinces, it has been shown that there are 850,000 acres under cultivation with cotton, yielding 857,000 cwt., half of which is consumed in the country, and the other half sent to Calcutta for exportation. In addition, large quantities are sent from the independent States of Gwalior, &c., also to Calcutta for exportation. But what is wanted in this country are agents to make advances, and purchase from the native cultivators their cotton on the spot. By so doing, the cotton cultivation in the North-West Provinces might easily be tripled.

"Tea cultivation in the Kohistan of the North-West Provinces and Punjab has now become a great success, so much as to have induced me to recommend Government to part with their experimental tea farms. One farm I sold a short time ago for L.10,000. The remainder will be put up in three lots, and for them I expect to realise about L.60,000. They will form an excellent nucleus for companies, of which there are now many already established. Dr Cleghorn has been visiting some of my tea plantations, and from him I daresay you have received accounts regarding their flourishing condition. Per post I send you a report on the condition of our gardens, which will show you that we are not idle in this country.

"The Saharunpore Garden has been the means of distributing a great number of important plants over India as well as to Britain. Flax has been cultivated extensively from imported seed, and it is expected that the production of it may be of vast importance to our Indian possessions. But flax is not the only fibre which deserves the attention of Government. There are many others. Nowhere, however, is there a collection of the raw products of the north-western provinces to be met, and it is only on pressing and extraordinary occasions, such as a European war causing a dearth to the British looms, that attention is paid to the fibres and fibrous stuffs of India. Attached to all the great public botanical collections in Europe, there is now an Economic Museum in which are exhibited all the raw materials belonging to the vegetable kingdom in the form of different kinds of woods, fibres, seeds, fruit, oils, gums, resins, sugars, food-yielding substances, medicinal substances, dyes, or, in other words, a collection not only interesting but practically useful to parties of all professions. In India nowhere does such a collection exist, and nowhere could a complete one more easily be brought together, provided that it is countenanced by Government, as in the agency at their command there is a band of officers who, for intelligence and efficiency, are not to be surpassed in any country, and who would gladly assist in bringing together the products of their districts. Were samples of these products all contained under one roof, not only would parties be able to compare the products of different districts with one another, but also they would be able to bring to light such as would be useful in the arts and fitted for the looms of the mother country. For locating such a collection the Saharunpore Garden is ad-

mirably fitted, as from the officer in charge it would always receive the attention that it deserves, and he would always have an opportunity of bringing to the notice of the public valuable materials. To the home manufacturer, the *Sunns*, *Hibiscus*, *Patsuns*, *Crotalaria*, *Helicteres*, *Sunnees*, which everywhere abound, and which are so admirably fitted for the British looms, particularly those of Dundee and Brechin, &c., at present are unknown. To the British manufacturer, our *Boehmeria*, *Bauhinia*, *Daphne*, *Sterculia*, *Marsdenia*, *Aloe* fibres are also unknown. The same was the case with Bengal jute, *Corchorus olitorius* and *capsularis*, a few years ago, but which now forms a trade of tens of thousands of tons, giving employment to thousands of individuals. To bring together such a collection, a proper building for its accommodation alone is wanting, as every officer would willingly and readily collect the products of his district when made cognisant of the object Government had in view. To erect such a building, there is an excellent vacant space in the Garden available for the purpose, all therefore that are wanting are funds.

"From the tea plantations there have been distributed gratis to tea companies and private planters during the season, the immense quantity of eighty-nine tons of seeds, and two millions three hundred thousand seedling tea plants, thus scattering this important plant broadcast over the Kohistan of the north-west provinces and Punjab.

"For the medical department of the public service, large supplies of extract and dried leaves of *Hyoscyamus* have been prepared. The following medical substances have also been forwarded to the Chief Medical Store-keeper and Medical Depot-keepers, in compliance with requisitions from the Secretary to the Chief Inspector-General of Hospitals:—Tubers of *Atees* (*Aconitum heterophyllum*), the powder of Kaimailee (*Rottlera tinctoria*), and the roots of the Barberry (*Berberis*).

"In conclusion, I beg to state that the head gardener, Mr W. Bell, selected by you for the Saharunpore Gardens, has joined, and through his aid I trust to add to their efficiency and usefulness."

VI. Letter from Dr THOMAS ANDERSON, Superintendent of the Botanic Garden, Calcutta, on the Introduction of *Cinchona* Plants into India. Communicated by Professor BALFOUR.

Dr Thomas Anderson, superintendent of the Calcutta Botanic Garden, writing from Darjeeling of date 13th August 1862, says:—"I am here superintending the introduction of *Cinchona* into the Sikkim Himalayas since the 1st of June, when I had 211 plants. The experiment has been so successful that on the 1st August the nursery contained 1611 plants and seedlings. I have seven species under cultivation. Among these are *Cinchona succirubra*, *C. Calisaya*, *C. nitida*, and *C. micrantha*. It promises to be a most successful experiment on those moist hills."

In the same letter he says—"I have told my gardener to send you a small Wardian case containing plants of Wallich's gigantic bamboo from Burmah. The largest plant in the Calcutta Botanic Garden flowered last year after forty years' cultivation. The plant ought to grow well in your big palm-house."

A note was read from Dr Alex. J. Smith, in which he stated that *Asplenium septentrionale* had recently been collected by Mr Halliday, of Moffat, on one of the Moffatdale Hills, called Whitecoom.

Nature-printed specimens of alpine *Hieracia* were exhibited from Mr Baker.