

called) to Ceylon, *L. vernalis* ranges over the hilly regions of all India, with Asám, Arakan, the Tenasserim provinces, and also Java; like *Palæornis barbatus*, and similarly without invading (as it would seem) the regions tenanted by *L. galgulus* together with *P. malaccensis* and *Taxygnathus malaccensis*. It may further be remarked that the whole of these species are such as no zoologist would hesitate in regarding as indisputably distinct, with the exception of *Loriculus asiaticus*, which some would consider to be a local variety of *L. vernalis*; in which case the race of the Philippines (*L. rubrifrons*) and another we have seen figured with the entire head crimson, should likewise rank as varieties merely of *L. vernalis*.

Notice of Lieut. STRACHEY'S Scientific Enquiries in Kumaon.

From J. THORNTON, Esq. Secretary to Government, N. W. P.

To Secretary, Asiatic Society, Calcutta.

SIR,—I am desired by the Honorable the Lieutenant-Governor, N. W. P. to request that you will lay before the Asiatic Society, the annexed copy of a letter from Lieutenant R. Strachey, Bengal Engineers, who has lately been engaged on scientific enquiries in Kumaon, under the orders of this Government.

2. Lieutenant Strachey has embarked for England in the March Steamer from Calcutta, carrying with him all his papers and collections, which will be placed at the disposal of the Honorable the Court of Directors.

3. Lieutenant Strachey had not sufficient time after his return from Kumaon, to prepare any of his papers for publication. This will be more advantageously and easily done in England. My present communication is designed to inform the Society, and through them the public generally, of the nature and extent of Lieutenant Strachey's researches, and of the quarter, whence further information respecting them may be expected.

I have the honor to be, Sir,

Your obedient humble servant,

J. THORNTON,

Agra, the 25th March, 1850.

Secy. to Govt. N. W. P.

From Lieut. R. STRACHEY, Esq.

To J. THORNTON, Esq. Secretary to Government, N. W. P.

SIR,—I have the honor to inform you that, in accordance with the permission granted to me by the Honorable Lieutenant Governor, I left Kumaon on the 4th Ultimo, having then brought to a conclusion my operations in that province.

In my letter to your address of the 3d April 1849, I explained fully the progress that I had made in my undertaking up to that date, and it will now therefore be only requisite that I should state what has been done in addition since that time, and to submit for the consideration of the Honorable Lieutenant Governor, my views as to the plan that should be adopted for the publication of the results of my enquiries.

The first object to which my attention was directed, the construction of the section of the Himalaya explanatory of its Botanical Geography, is still of necessity left incomplete; but the materials for its compilation are very ample, and the additional knowledge that has been acquired by Major Madden and myself during the past year, will be of much value in completing this part of my undertaking.

The provisional drawings of that part of the line which was best known, to which I referred in my letter above alluded to, were completed and have been submitted to the Honorable Lieutenant Governor. A memoir to accompany and explain these drawings was drawn out by Major Madden, but owing to my not having had any opportunity of conferring with that gentleman on the matter and to my attention having been unavoidably diverted to other objects that came more immediately before me, this paper has not been yet brought into a form suitable for publication.

The whole of my herbarium which now contains upwards of 2,000 species is now on its way to Calcutta, whence it will be sent on to England. On its arrival there I propose to undertake the comparison of the whole of it with properly named specimens, such as are to be found in the great Botanical collections in Europe, and then to draw out a fresh section with all the care that can be bestowed upon it.

I should likewise propose to draw out, if it be practicable, a catalogue of all the plants contained in my herbarium. This would form a valuable index to the Botany of this part of the Himalaya, and in it could be embodied descriptions of new plants, and identifications of synonyms,

besides some short description of the nature of each plant and the locality in which they are found.

I have greatly increased my knowledge of the Geological structure of Kumaon and Gurhwal during the past year, and I have added to my former collections a very considerable number of fossil shells &c., from the northern part of the mountains, from which I feel confident that the geological age of the strata in which these are found may be perfectly ascertained; and on the whole I consider that I shall be able to draw out a very fair geological map of Kumaon and Gurhwal, as well as geological sections such as were at first proposed.

My geological specimens are also now on their way to England with the herbarium.

In the department of Zoology matters are just as they were; the few specimens that I collected have likewise been dispatched to Calcutta.

The panoramic drawing of the mountains from the summit of Binson, has been completed, as I before said it had begun; this has also been laid before the Honorable Lieutenant Governor.

During the past season also my brother Captain H. Strachey, 66 Native Infantry, and I have been able to make some important additions to the topography of the country to the north of the snowy range in Kumaon and Gurhwal, by fixing, by trigonometrical operations, the position of the celebrated peak of Kailas, and of several other points of note. A map showing the combined result of this work and what was before known of this country has been executed by my brother, and has been shown to the Honorable Lieutenant Governor.

The calculations, on which the constructions of the map rests, were worked out by me sufficiently to permit of its being executed, but they take much time and must be carefully revised before any numerical results are published.

The meteorological observations which I was anxious to undertake have been conducted with as great care as was possible, and I have collected a considerable map of materials, which will I trust be a valuable addition to our knowledge of the phenomena in question. Besides other ordinary registers, I was enabled with the help of my brother Captain H. Strachey to make horary observations for a period of 24 hours at an elevation of 18,400 feet; as well as similar horary observa-

tions for periods of several days in succession both at Niti, at about 11,500 feet, and at another place at a height of about 16,500 feet above the sea. I propose to undertake the reduction of these observations as soon after my return to England as is possible.

Magnetic observations of dip and intensity have been made by me at a great number of stations in Kumaon and Gurhwal, up to the elevation of 18,400 feet. On my way down to Calcutta, I have also observed the dip at some of the places at which I stopped.

In conclusion it appears to me that the best form in which the result of my enquiries in Kumaon can be published is, as a work on the Physical Geography of this part of the Himalaya. It is of course out of my power to offer to undertake any thing of this sort from my own private resources, but should the Honorable Court of Directors consider that the information which I have acquired is of sufficient value to induce them to give their countenance to such a work, and should they be satisfied with my ability to execute it in a becoming way, I shall consider it to be my first duty to undertake it and to devote myself entirely to its completion.

I have the honor to be, &c.

(Signed) R. STRACHEY,

Late on special duty in Kumaon.

(True Copy)

J. THORNTON,

Assist. Secretary to the Govt. N. W. P.

Calcutta, the 7th March, 1850.

Memorandum relative to the Storms of Wind experienced in Tartary, with suggestions relative to them, for the Mission proceeding there.
—By HENRY PIDDINGTON, *President of Marine Courts.*

The following Memorandum was drawn up for the use of the Mission proceeding to Chinese Tartary in 1847, which, as then announced, expected to winter at Yarkand. Documents of this nature are, the Editors think, always worthy of permanent record, inasmuch as they fulfil their object not only at the time, but in future, when other expeditions or opportunities for observation may occur, and are moreover scientific notes which are too useful to be lost, and do not readily occur in all their bearings to any but those whose minds have been directed to the questions to which they relate.—EDS.

1. Heavy storms of wind, which either from their violence, or their veering to different points while blowing, or from both, are by all