later on at Unterschächen, in the Schächenthal. There is one good hotel in the village—the Klausen. The valley is interesting, and can be reached in 3 hrs. by diligence from Altdorf. Unterschächen reminded me of pristine Engelberg. I wonder, if I revisit it, at a very advanced age, in thirty years' time, whether it will then be as like Engelberg as it is now.

Engelberg wishes to rival Grindelwald; but, I suppose owing to the influx of Germans, it does not attract many English. They chiefly congregate in the large Sonnenberg Hotel. The landlord of the Engel Hotel, where I stopped, told me that he purposes building a winter hotel to attract English visitors. Winter hotels must be specially constructed, and those at Engelberg are not sufficiently substantial for a winter season. Shut in on all sides by precipitous mountains, as Engelberg is, the climate in winter is mild and free from cold winds.

## THE HIGHEST MOUNTAIN IN THE WORLD.

BY DOUGLAS W. FRESHFIELD.

Some years ago (in 1886) I argued,\* with a pertinacity which I am afraid may have seemed presumptuous, against the conviction of the late General Walker, formerly the head of the Indian Survey, that Hermann Schlagintweit, together with Mr. Brian Hodgson, a witness of great weight, and more recent Residents in Nepal, were mistaken in believing that the snowy peaks visible to the E. from the neighbourhood of Katmandu, and called 'Gaurisankar' by the inhabitants, included the triangulated peak, 29,002 ft., commonly known in England as 'Mount Everest.'

Major (now Colonel) Waddell, an authority on these matters, expresses what I presume has been the popular verdict on the

discussion in the following terms: --+

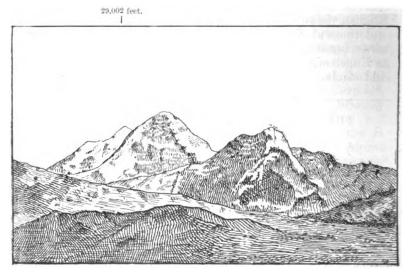
'On the Continent one of the vague Indian mythological names, obtained by Schlagintweit from the Hindooised Nepalese of Khatmandu, for a mountain which he supposed to be identical with the Everest of the Survey, is usually assigned to it—namely, "Gauri-sankar," one of the titles of the conjugal Indian god Shiva, the Destroyer, and his wife. But it is not generally known that the identity of these two mountains has been conclusively disproved by General Walker, the late Surveyor-General of India, and by Colonel Tanner, his deputy. Owing to the curvature of the



<sup>\*</sup> Proceedings of the Royal Geographical Society, vol. viii., New Series, and Alpine Journal, vol. xii.

<sup>†</sup> Among the Himalayas. By L. H. Waddell. 1899. I have not altered the spelling of the local names adopted by the author.

earth, and the interposition of other ranges, it is physically impossible to see Everest either from Khatmandu, or the Kaulia or Kakani peaks, whence H. Schlagintweit believed he saw it, and got his local name, "Gauri-sankar." As for Kanchenjunga, which Schlagintweit says was also visible from that position, it is shown to be "fully one hundred miles beyond the most remote point visible from that locality." And Colonel Tanner has directly proved that the Gaurisankar of Schlagintweit is certainly not the Everest of the Survey, but a much smaller and totally different mountain. He writes, "I have now before me the panoramic profiles and angular measurements of Major Wilson, for some time Resident in Nepal, who observed from Sheopuri a point on the

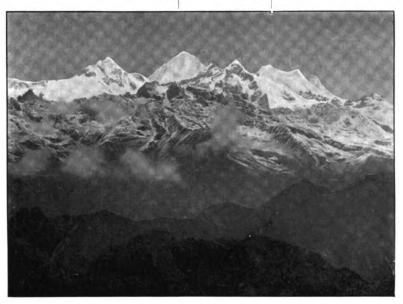


PEARS VISIBLE TO THE E. FROM NEAR KATMANDU.

After a Photograph by Dr. Boeck.

Kaulia ridge. Schlagintweit's Gaurisankar, the 'Everest' of successive political Residents in Nepal, was pointed out to Major Wilson, and from his angular measurements I am able to identify that peak as No. XX., 28,447 ft., more than a mile lower than Everest, and in point of distance very far short of it."'

So far Colonel Waddell. His assertions are convincing on first reading, but will hardly bear close examination. Had he referred to the official map, of which he furnishes a reproduction, he might have noticed that there is nothing in that document to show that it is impossible, either from the curvature of the earth or the interposition of other ranges, separately or combined, for the peak of 29,002 ft. to be seen at a distance of 105 to 110 miles from a height of 7,000 to 10,000 ft., some seven miles north of Katmandu.



Telephotograph.

THE NEPAL PEAKS FROM HOOKER'S CHUNJERMA.



Makalu.



Telephotograph.

THE NEPAL PEAKS FROM SANDAKPHU.

From Katmandu itself the great peak would apparently be covered by the peak XVIII., 21,957 ft. But what can be seen from the

city itself never formed any part of my argument.

In 1886 I concluded my share in the discussion by stating that it must be left for some competent observer at Katmandu to decide whether the group crowned by the 29,002 ft.-peak is visible from the hills in the vicinity.

At the end of last year two fresh pieces of evidence turned up. Lieut.-Colonel Pears, the Resident at Katmandu, confirmed to me the report of his predecessors that the snows seen to the east from near Katmandu are locally called 'Gaurisankar,' and Mrs. Pears exhibited at the Alpine Club a sketch of this range. The objection will, of course, be taken that this new evidence by itself is only a confirmation of the statement of earlier travellers that the eastern snows seen from this quarter are called Gaurisankar, and no proof that the 29,002-ft. summit is one of the peaks visible. But we have also, in a German work \* just published, a photograph of the view of the eastern snows from the hill (Kaulia and Kakani are points on the same ridge) visited by Schlagintweit, with what is obviously an enlargement of part of it, showing the principal group.

Now in these photographs, just over the northern flank of a peak we can hardly be wrong in recognising as XVIII., appears a snowy mountain, the outline of which corresponds very closely, taking into account the relative positions from which the photographs were obtained, with the outline of the 29,002-ft. peak in Signor Sella's photograph, as seen from the Chunjerma Pass in eastern Nepal. And this mountain is in the exact position where 'Mount Everest' should be. It may be, as the Surveyors insisted, hidden from the city by Peak XVIII., but the situation of Kakani, a few

miles further N., suffices to open it.

This summit was, we understand from Dr. Boeck, pointed out to him as Gaurisankar, and he, apparently quite unconscious both of the previous visit of his fellow-countryman to the spot, and that he is dealing with a controversial matter, congratulates himself on his accomplishment of a pilgrimage to 'Gaurisankar-Everest, the

highest mountain of the earth.'

It seems, therefore, to me that Dr. Boeck has furnished some fresh evidence in favour of the view that Mr. Hodgson was right after all, and that the summit known in this country as 'Mount Everest' forms part of the group visible, and known as 'Gaurisankar,' to the natives of central Nepal. I should add that a summit apparently corresponding in position with the Peak XX. of the Survey is also recognisable in Dr. Boeck's photograph.

I trust I have made it clear that the point I have been arguing throughout is, whether the 29,002-ft. peak is among the snows visible from Kakani, and known as Gaurisankar, and not, whether Schlagintweit, or Major Wilson, or other observers, have identified rightly the particular summit. Most visitors to Sikhim, including

<sup>\*</sup> Durch Indien im verschlossenen Land Nepal. By Dr. Boeck. 1893. VOL. XXI.--NO. CLIX. Z



the Schlagintweits and, at one time, General Walker himself, mistook Makalu for the highest peak. This does not affect the fact that 'Mount Everest' is visible from Sandakphu. Nor could the failure of Europeans at Katmandu to recognise which was the culminating point of the group the Nepalese call Gaurisankar prove that the 29,002-ft. peak is out of sight, or is not called Gaurisankar. Another instance nearer home may help to make the case more clear. On the Italian Lakes the Saasgrat has been frequently mistaken for Monte Rosa. No one would argue on this account that Monte Rosa is invisible, or has not the best right to its name. The reason for which the Surveyors argued so strenuously fortyfive years ago that the 29,002-ft. peak cannot be the Gaurisankar of Nepal was, of course, that their chief's proceeding in giving the mountain an English name was excused, or justified, at the time by the assertion that it had no local or native name. We have now got two native names, the Indian name Gaurisankar and the Tibetan name Chomokankar, long ago brought forward by Chandra Das, and, though never, so far as I know, seriously disputed, generally ignored, until Colonel Waddell brought it into prominence. Personally I should like to see Gaurisankar win the day.

Dr. Boeck declares quite positively that from Kakani he recognised Kangchenjunga, Kabru, and Jannu, and, as in a previous year he had made the trip from Darjiling to Pamionchi and Akluthang, he ought to have had no difficulty in recognising such characteristic forms. Dogmatic assertions about the visibility of Kangchenjunga from certain points in central Nepal can, however, carry no weight until confirmed by substantial evidence. All depends on the exact height of the standpoint and the intervening ranges. As far as the curvature of the earth is concerned there is no difficulty whatever. I have recognised with the naked eye, and examined with glasses, from a summit (Punta di San Matteo) of the Orteler group Monte Viso, 210 miles distant, and some of the triangulations of the Indian Survey depend on rays of even greater length. Kangchenjunga is less than 200 miles from Katmandu and is 16,000 ft. higher than Monte Viso. But, as far as I can judge from maps, the southern outliers of the Gaurisankar group, over 20,000 ft. in height, would effectually mask the Sikhim mountains from the W. I trust that Colonel Pears on his return to India may be able, with the help of the Surveyor-General, to obtain telephotographic views of the snowy range, with the bearings of the principal peaks as seen from central Nepal, and thus settle definitely the matters still in controversy.\*

<sup>\*</sup> The Journal of a native surveyor who crossed a pass only 24 miles west of the 29,002 ft. summit, which was issued as a separate Report in 1887, adds nothing to our knowledge of the mountain nomenclature.