

be lost for ever. Some of the most valuable racial curios are now actually unprocurable. The long straight swords of the Mishmi, in the extreme east, were formerly found among all the races north of the valley as far west as the Kuki, and are now a tradition only. The Noga "Kyep," hide cuirass, identical with that of the Niasi, west of Sumatra, are impossible to get hold of, though common here thirty years ago—firearms rendering them useless.

An organised army of intelligent workers is badly wanted to save the stores of unwritten history seen in *customs* among all these races. They are pre-Aryan races, and if but a tenth of the time and money now being lavished on the Aryan remains, here and at home, were devoted to these far older, and far more interesting races, the result would astonish home folk. The races of the Pacific, and Archipelago (Australia included), came from India, as Polynesian investigators well know, but cannot easily join the proofs across the Malayan region.

Can nothing be done to arouse attention to this matter? Some of the customs are of the greatest possible value in the elucidation of the development of early human institutions such as marriage; and in the *Journal* of the Asiatic Society of Bengal, vol. lxi, pt. ii., No. 3, 1892, pp. 246 to 269, I drew attention to one of them in "The communal barracks of primitive races," a vast subject, on which alone there is enough to occupy many experts for several years, as its ramifications extend from West Africa to Eastern Polynesia, and from the Himalaya to New Zealand.

There are many willing and capable workers in the East, but scattered over a vast area; a central "association" is needed, say at Singapore, to and from which communication is easy. An association of scattered students, rather than a new society, is wanted, and it would cost very little if the local branch of the Asiatic Society took the matter in hand as a branch of its work, charging those engaged in research a transmission fee on all that passes.

At the present moment I am most anxious to get in touch with some one in Formosa, so as to procure photos of the savages, their houses, &c., to compare with our Noga, who, I believe, are the same race stock, but I am not able to get the names and addresses of workers there; a central association at Singapore could very probably afford help in such matters.

The Anthropological Institute of Great Britain and Ireland is too far off to give this aid; besides, it is not a live society, or anthropology would not be in such a pitiable slough as we see it here. The collection of life-sized nude nondescript effigies in the Indian Museum reveals our state at a glance; they are to amuse the hundreds of natives who gape at them daily. The value of it as a collection is measured by the *numbers* who stare and get thoroughly mystified, and this is proudly published every week. As an ethnological collection it is enough to drive an expert mad.

S. E. PEAL.

Sibsagar, March 31.

A Curious Luminous Phenomenon.

THE phenomenon mentioned on p. 31 of NATURE (May 13), is undoubtedly subjective, and has to do with the fatigue of the retina.

I observed it very markedly in the case of an orange round which I was skating on the open-air ice-rinks in the Engadine; all the country about being white, and the ice, too, being dazzling.

The blue-violet margin to the orange was zero, or at a minimum, when I fixed my eye on a point on the orange. It was at a maximum when I glanced quickly round the orange, or when the orange rolled. In the latter case it was unsymmetrical and "trailed."

I satisfied myself, by the experiments that I tried, that the portion of the retina protected from the white glare by the image of the orange, received an impression of blue-violet light when the protection of this image was removed owing to the movement of the eye or of the object; but that this peculiar condition of the portion of the retina in question was very transitory.

It is possible that temperature affects the phenomenon indirectly; since the eye may be more unsteady, and wander more, when the temperature is low.

Experimenting in England with less white and dazzling ice and landscape I found the phenomenon less marked. It was very brilliant and beautiful in the Engadine.

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I feel sure that if any observer notices the effect of keeping his eye fixed on some point of the body so as to keep the image on a constant portion of the retina, he will come to the same conclusion as myself.

W. LARDEN.
R. N. E. College, Devonport.

Röntgen Rays.

I HAVE had a focus-tube constructed, in which the distance between the electrodes can be varied, after Mr. Campbell Swinton's pattern, but in which the kathode is made the movable electrode, and the adjustment is made by magnetic control. This is effected by attaching a disc of soft iron to the sliding-rod of the kathode. The advantage of this arrangement is that the kathode can be moved up to, or away from, the anode while the tube is working, so that the best effect can be at once obtained. The resistance is, as Mr. Swinton has pointed out, greater when the electrodes are close together than when they are far apart. The best fluorescent effects are, however, obtained when the electrodes are so close together (about one millimetre apart) that a very bright arcing discharge occurs between them. The screen is now lighted up much more brilliantly than when they are at any other distance apart. The very bright fluorescence is only obtained when the arcing discharge occurs. If the electrodes are brought any nearer together, the platinum anode becomes red-hot, the fluorescence fails, and the resistance of the tube increases very rapidly. I do not remember having seen this noted before.

Edinburgh, May 10.

DAWSON TURNER.

THE ROYAL SOCIETY SELECTED CANDIDATES.

THE following are the names and qualifications of the fifteen candidates selected by the Council of the Royal Society, to be recommended for election into the Society this year:—

ROBERT BELL,

M.D., B.A.Sc., LL.D. Assistant Director of the Geological Survey of Canada. Has been actively engaged in the field work of the Survey for thirty-six years. Was concurrently Professor of Chemistry and Geology, Queen's University, Kingston, for five sessions, 1863-68; Naturalist and Medical Officer on the Government Expeditions to Hudson Bay, 1884-85; Royal Commissioner on the Mineral Resources of Ontario, 1888. Distinguished for his services to Canadian Geology, having worked over large sections of the Dominion east of the Rocky Mountains. Has made extensive researches among the Laurentian and Huronian Rocks, and in reference to Glacial phenomena. Has added materially to our knowledge of Zoology and Botany—more especially of the Forestry—of Canada. Has published nearly 100 reports and papers of a scientific character. They include upwards of twenty reports, some accompanied by maps of the Geological Survey, between 1857 and 1890, giving the results of geological and topographical surveys and explorations on both sides of Hudson Bay and Straits, along the principal waters between the upper Great Lakes and James Bay, and of those between the Winnipeg Basin and Hudson Bay, the first survey of Lake Nipigon, geological surveys of the Canadian Sudbury Mining Districts, the Gaspé District, the Lake Peninsula of Ontario, and in other parts of the extensive regions of Canada. Although much condensed, these Reports cover about 930 pp. royal 8vo. Among many additional publications may be mentioned "The Causes of the Fertility of the Land in the Canadian N.W. Territories," "The Petroleum Field of Ontario," "The Huronian System in Canada," "Glacial Phenomena in Canada," "The Geology of Ontario, with special reference to Economic Minerals," "The Laurentian and Huronian Systems North of Lake Huron," "The Origin of Gneiss," "The Forests of Canada," "The Forest Fires in Northern Canada."

Supplementary Certificate.—Since the date of the above certificate Mr. Bell has made further geological investigations of importance north of Lake Huron, and a survey of a large river previously unknown to geography in the country south-east of James Bay, besides a general geological and topographical exploration of an extensive area in that region. He has now been connected with the Geological Survey of Canada for forty years,