GEOLOGICAL SURVEY OF TASMANIA.

By C. GOULD, Esq.,

The formations treated of were the Upper Palæozoic marine deposits and the coal-measures. The apparent conformability of the two sections was shown, together with their intimate connections, serving to render their consideration inseparable. The coal-measures exist to a greater or less extent through the country, the depth being about nine hundred feet. They may be regarded as constituting two distinct fields, the maximum one, the Mount Nicholas Coalfield, comprehending the various portions developed upon either side of the Break o' Day Valley; the other the Douglas River Coalfield, between Long Point and Bicheno. In the first the position of the principal seams of coal, although highly advantageous to their being worked, is at an elevation of from one thousand two hundred to one thousand five hundred feet above the sea. There were at least six distinct seams in the Mount Nicholas coalfield, one of which was of superior quality and twelve feet in thickness. Since the discovery of the seam, experiments have been made which, though amply sufficient to prove the value of the coal for domestic purposes, and for application to the usual branches of manufacture, have been upon too limited a scale to permit of the determination of its value as a steam-fuel. A remarkable shale exists in the north of the island, available as a source of paraffin and paraffin-oil. The Mersey coal-field was one of very few in Tasmania which is actually worked; for, although the extent of coal throughout the island is almost unlimited, there are very few points at which any operations are conducted.

 THE IMPERIAL GEOLOGICAL INSTITUTE OF VIENNA.

Sir R. I. Murchison communicated information from the Director Haidinger, respecting the present state of the Imperial Geological Institute of Vienna. That important institution was one of many which were very likely to have been abolished in the course of the changes which were going on in the empire of Austria. It was founded by Dr. Haidinger, one of the first geologists in Europe, who now wrote that, public opinion having been expressed strongly in favour of the institution, the government had conceded all the terms in favour of geological science which had been formerly granted, and the Imperial and Royal Geological Institute of Vienna was reinstated upon its old foundation.

 CARBONIFEROUS LIMESTONE.

By MR. RICHARDSON, C.E.

Details of the carboniferous limestone, as laid open by the railway-cutting and tunnel near Almondsbury, north of Bristol. There was a branch railway making from Bristol, from the Great Western line, which traversed the Severn. In making this traverse, it was necessary to go across a ridge of limestone, at Almondsbury, the railroad running across that country of carboniferous limestone. On the whole the strata were deep, and subject to very great con-