

central cone of Jorullo is still burning, and on one side has thrown up an immense quantity of scorified and basaltic lava, containing fragments of primary rocks. Two rivers of thermal water, of the temperature of 126° of Fahrenheit, have burst through the argillaceous vault of the hornitos, and flow into the neighbouring plain.

22. ORGANIC REMAINS IMBEDDED BENEATH LAVA.—In the course of these inquiries, we have been familiarized with the striking contrast presented by the effects of high temperature, exerted under great pressure, to those resulting from heat and combustion in the open air. Thus we have seen that in the earliest geological eras, eruptions of basalt have burst through and overflowed sedimentary strata, and yet the most delicate animal and vegetable substances have remained; transmuted, indeed, into stone, but still retaining their original structure—as, for instance, the vegetables of the carboniferous system, and the shells and corals of the lias, oolite, and of the chalk. In the cretaceous formation of Glaris, although the strata have been converted into slate by igneous agency, the fishes still remain (page 338)—the limestone of Monte Bolca, though capped with basalt, yet swarms with ichthyolites (page 251)—the fiery currents of Auvergne have flowed over the lacustrine limestones, and still the remains of insects, serpents, birds, and quadrupeds, are uninjured (page 260)—the tertiary forests of the Andes, which grew on beds of lava,