the action of the salts in the water, enable them to readily and easily eject foreign and poisonous matters from the system.

Evidences of Origin.

From the enormous quantities of C stored up in coal beds and the Cretaceous rocks, it has been inferred that the primitive atmosphere was very rich in carbon, that large volumes must have been dissolved by the first fluid "Magma" and remain there today. As long ago as 1866 and 1877, Berthelot and Mendelieff suggested probable carbides and probable generation therefrom of hydrocarbons.

In the Archæan rocks a highly carboniferous gneiss is found in crevices, which it was formerly suggested might be the fossilized remains of the earliest organisms, and hence termed "Eozoon" (dawn of life). It has been shown [a]that this carboniferous material is far more likely to be an emanation from the highly carbonized magma, which has oozed up through the igneous rocks and forced itself into crevices in the Archæan rocks, further evidenced in the [b]pegmatite dykes in granite and gabros.

The Association of Pyrites [c]with these graphitic deposits is frequently noticed, and it has been shown that this association of carbon and sulphur is constantly encountered in igneous formation and has been noticed in meteorites.

Many wonderful evidences of what might be termed naturally partly purified carbonaceous products have been met with in various drilling operations into the Paleozoic rocks, affording substances similar to [d]Ozokerite, a natural earth wax occurring in Galicia and Roumania. One sample, yellow in color, obtained at Little Ochiltre, afforded on analysis C 84.35, H 12.83, N 1.68, with traces of sulphur.

The accounts given by survivors of the violent volcanic eruptions, such as devasted Martinique, in 1902, describe enormous volumes of flame, only attributable to gaseous hydrocarbons, confirmed by the [e]zonelike map of charred nature left behind. Besides which, various samples of gases evolved from volcanic sources have been collected and examined, affording successively HCl, Chlorides, SO_2, H_2O, finally CO_2, and hydrocarbons. Siemens, in 1878, being led to the conclusion

(a) The Volcanic Origin of Natural Gas and Petroleum.—Coste.
(b) Geological Survey of Canada, by Dr. Barlow, Vol. X.
(c) Ditto, Vol. VII.
(d) Organic Chemistry.—Perkin and Kipping.
(e) U.S.A. Geological Survey.—R. T. Hill.
(f) Le Blanc on Vesuvius Eruption, 1855-6.