On the occurrence of galena in the inferior oolite

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narcotine; and Robiquet has informed us, that by digestion in æther, the drug may be depurated of that noxious principle. It struck me, as soon as I became acquainted with the statement of Robiquet, that it was of the utmost importance to humanity to have it tested, and the result made known to my countrymen, if favourable.

Some opium, shaved by rubbing it on the face of a jack-plane, was subjected four times successively to as much æther of the specific gravity of .735 as would cover it, allowing each portion to act upon it for about twenty-four hours.

The opium was afterwards subjected to as much duly diluted alcohol as would have been adequate to convert it into laudanum, of the common kind, had it not been subjected to the æther. In the æther which had been digested on the opium, a deposition of crystalline matter soon commenced. The stopple being removed, and the mouth of the containing vessel, (in this case a common French tincture bottle,) being covered with blotting paper, in a few days nearly the whole of the liquid evaporated spontaneously, leaving much crystalline matter mixed with colouring matter. The former is, no doubt, the principle distinguished by Robiquet, since called narcotine.

The digestion of the opium with the æther is conveniently performed in the Papin's digesters, which are sold at some of the hardware stores in this city.

The æther should be kept near the temperature of ebullition.

The first use which was made of the denarcotized laudanum, was by way of an enema of thirty drops, in the case of a child tortured by ascarides, to whom it gave early relief, inducing a comfortable, and apparently natural sleep, and causing subsequently no unpleasant symptoms. The second instance was a case of severe headache, which was relieved in about thirty minutes, by ten drops taken into the stomach. A refreshing slumber succeeded, which was not followed by any of the distressing sensations to which the patient has always been subjected, after taking common laudanum.

Dr. Hare then subjoins some cases of the successful exhibition of denarcotized laudanum, by a medical friend.

ON THE OCCURRENCE OF GALENA IN THE INFERIOR OOLITE :

BY MR. W. LONSDALE.

In widening the road between Frome and Buckland Denham in the autumn of last year, the workmen laid open a section about fourteen feet deep in the inferior oolite. The stone was broken *in situ* into irregular fragments, which in some instances were parted by a mere fissure, and in others were separated to the distance of six or eight inches. Near the centre of the section occurred a perpendicular vein six feet wide, of a stiff blue clay. From some distance on each side of this vein, small strings of galena appeared ramifying through the interstices of the stone, occasionally filling them entirely, and then exhibiting the appearance of a breccia of oolite cemented by lead; but most commonly crystallized carbonate of lime supplied the place of the ore. Specks of galena were likewise disseminated

disseminated through those portions of the stone which were adjacent to the fissures occupied by the metallic mineral. Towards the top of the section cakes of the sulphuret of lead were found in a loose state, and exactly filling the irregular cavities in which they were deposited.

The above description I received from one of the overseers and from the men employed upon the road. As I was desirous of ascertaining as far as possible the truth of the account, T. Bunn, Esq. of Frome, to whose love of science we are indebted for a knowledge of this interesting phenomenon, had the road opened for my inspection. The result verified the previous details.

I presume that this is the first instance in which galena has been found in so comparatively recent a formation; but the connection of the inferior oolite with the carboniferous limestone in that neighbourhood, apparently affords data for attempting an explanation of its occurrence. The latter rock is well known to abound with lead. At Shipham near Axbridge, the dolomitic conglomerate, which occupies a position analogous to that of the inferior oolite of Frome, also contains numerous irregular veins which yield galena. In both the newer deposits the situation of the metal accords with the character of the stone. The inferior oolite possesses a natural tendency to split into angular fragments, and in consequence of its great softness would divide with facility in their direction to every disruptive force. The dolomitic conglomerate has no natural cleavage; and at Shipham is a rock of great hardness: it would therefore yield only to a powerful agent, and then not in narrow fissures, but in chasms of great diversity of form.

When these circumstances are considered,—the metalliferous nature of the mountain limestone, the total absence of galena in the oolite, when other formations are interposed between it and the older rock,—we may surely be permitted to conclude, that whatever power, whether it were infiltration, infusion in a molten state, or sublimation, by which the ore was deposited in the carboniferous limestone, the same power acting cotemporaneously deposited it in the dolomitic conglomerate and inferior oolite. From these partial data we may likewise be permitted to draw the general conclusions, that the age which has been assigned to metallic veins is too remote; and that we may expect to find them, when our acquaintance with the unconformable superposition of rocks shall be greater, among the more recent of our secondary formations.

ECONOMY OF TEREDO NAVALIS, &c.

In the Report for the year 1826-7, of the Portsmouth and Portsea Philosophical Society, which has just been transmitted to us, appears the following report of a lecture, by Mr. C. Willcox, on the boring and lithophagous marine animals; containing some remarks on the œconomy of *Teredo navalis*, which seem to be important:—

The habits and œconomy of the *Teredo navalis*, the most destructive of the testacea, were described, and the irregular shape of the shell, description of the head, and formation of the