

then a last look into the huge abyss, we run easily down the side of the cone, and are in a few minutes at the Casa degli Inglesi again. Here we turn off towards the eastern side of the mountain, and soon come upon the edge of the Valle del Bove, to enjoy perhaps the most remarkable spectacle in Europe. We find ourselves now on the summit of an almost vertical cliff, nearly 4,000 feet high, which constitutes the head of an enormous cleft or valley, about eight or ten miles long by four or five broad; it is as if a piece, constituting about one-sixth part of the mountain, had been cut out of it. On either side it is bounded by cliffs of from one to three thousand feet high, and consisting of layers of lava and ashes traversed by dykes of basalt, trachyte, &c.; several volcanic cones are seen in it, of which Monte Simone, to the northern side, with its lava of 1811, and Centenario, Calanna, and Giannicola to the southern side, with the barren black lava of 1852, are the most noticeable; this immense depression was caused, according to the opinion of Sir Charles Lyell and of Gemmellaro the great Sicilian volcanologist, by the subsidence of an ancient felspathic volcano, which must, according to calculations made from the inclination of its lava currents, have been much higher than the modern pyroxenitic one. (La Vulcanologia dell' Etna, del Professore Carlo Gemmellaro; Catania, 1858.) Such a subsidence is well illustrated on the small scale by the Cisterna, a round hole about 300 yards in diameter, and at least 200 feet deep, which was formed precisely in the manner just mentioned during the eruption of 1792, and which we can see on our way back to the Montagnola; indeed, when we consider how much material is ejected during the various eruptions in the form of lava and of ashes, &c., we see that it would be strange if subsidences, and great ones too, did not happen occasionally.

We now descend quickly, finding our last night's tracks behind the Montagnola, and by 10.30 are off the snow, and find the mules ready for us. In returning to Nicolosi we are able to observe the various lava currents, and to study their sections in the channels of the streams which rush down during the melting of the snow in the summer months, and also to notice the gradual change in the vegetation which the darkness prevented our remarking during the ascent.

We find the heat more and more oppressive, and are afflicted with very severe headaches; on arriving at Catania we find it covered by a dense fog (an extremely unusual occurrence there), and so the congratulations on our safe arrival are mixed with wishes that the weather had been more favourable.

In a future communication some remarks will be made on a few observations taken during this excursion.

W. H. CORFIELD

#### Paraplegia in Kangaroos

SOME time ago I obtained from Mr. Fairgrieve the bodies of two Kangaroos, male and female, which died during the visit of Wombwell's Menagerie to the West of Scotland. In the female, which I received first, there was extensive ecchymosis in the nuchal region strongly suggestive of bites inflicted by her cage companions. To this I was disposed to refer the softening of the cervical spinal cord, which struck me when removing the brain. On visiting the menagerie, however, I found that her male companion was completely paraplegic, and that he had exhibited the same symptoms. The paraplegia had been progressive, and at the date of my visit, respiration was markedly thoracic. The animal was excited, but I could not satisfy myself whether this indicated cerebral disturbance or arose from the contagion of fear, a younger specimen in the same cage being much alarmed at my approach. The animal died at some distance from Glasgow. I made a careful post-mortem, and found no lesion save in the spinal cord and medulla oblongata. The removal of the cord was difficult, on account of the thickening of the membranes, and their adhesion to the bony walls of the canal. The cord was not merely softened; it was semifluid as far up as the origin of the cervical plexus, and welled out like thick cream from an accidental puncture of the sheath. Dr. Joseph Coats who assisted me in the examination, failed to detect any fatty degeneration of the nervous tissue. Its disintegration was, however, very complete. The other organs were healthy, and the body was well nourished. The disease was manifestly of short duration, and I can only hazard this conjecture as to its cause, that the cage was placed at the angle of the square formed by the cars, and that its inmates were thus exposed to draughts

and damp, giving rise to acute meningitis. As, however, an Australian sportsman informs me that something of the same kind has been observed in Kangaroos kept in confinement, and thus deprived, to a large extent, of their customary exercise, I ask space for this abstract of the case, in hope that some of your contributors may be able to throw light on an interesting pathological question.

JOHN YOUNG, M.D.,  
Glasgow University      Keeper of the Hunterian Museum

#### Geology and the Chatham Dockyard

BELOW the Alluvial deposit of St. Mary's Island is a very irregular surface of gravel, varying in thickness from 2 to 12 feet, and composed of flints but little rounded, and pebbles of Tertiary Sandstone; beneath the gravel is the Chalk. Now, the success of the Chatham Dockyard Works depends upon the stability of foundations that are built on piles driven into the underlying gravel, through which percolate considerable streams of water; this water must denude the chalk to an appreciable extent and form pot-holes, and the subsidence of the works can but be a matter of time. I can form no idea of the rate at which the Chalk would be denuded under the above conditions, as I am not aware of any experiments having yet been made on the "Action of Water on Chalk."

R. C. HART

#### Dust and Disease

PERMIT me to add my mite to Mr. Horace Waller's theory respecting the utility of mosquito curtains in warding off fever, generated by the miasma of decaying vegetation.

For the last twenty-five years I have held to this opinion, and acted on it in all my wanderings in the jungles of Ceylon, on the east coast of Africa, and in New Zealand, and I am convinced of its great utility. I have always likened it to Davy's "safety lamp," and I believe that over and above the "sieve-like" property, which a few days' use imparts to it, its value is great as warming the air which passes through its meshes, and keeping the temperature within it more steady and equal.

When the body is relaxed in sleep and the pores of the skin act freely, then is the time that the deadly miasma, cold and damp, even in the tropics, seizes on its victim. What jungle traveller does not know the feeling of the air an hour and a half or two hours before daylight? But the warmth from the body and breath within a well-secured mosquito net, I think effectually protects the sleeper.

This morning I compared the temperature outside and inside my mosquito net, and found it differ 8°, being 62° outside and 70° within, and even this was not a fair trial, for the bed is a large double one (two persons in it), exposing a large surface to the external air; the mosquito curtain being the largest sized *Net* that can be got (and not *Leno*) which I would advise for a travelling curtain in fever latitudes; and moreover, as our mosquito season is past, not tucked in all round as a well-secured curtain should be, yet with all these disadvantages the temperature inside was 8° warmer.

Then, again, who doubts that the body, invigorated by sound sleep, is not more able to resist disease in the day-time? Without a net in mosquito lands I find sleep impossible, and I suppose others do the same.

Let me therefore raise my voice in favour of the mosquito curtain, and advise all travellers in fever countries to look on it as their sheet anchor.

E. L. LAYARD  
Cape Town, Cape of Good Hope,  
May 3

#### HEINRICH GUSTAV MAGNUS

IN giving expression to the sympathy generally excited by the loss of Magnus, Professor Tyndall has raised the interest of the British public in a philosopher's life, simple, yet most eminently useful. At the present moment a mere outline of it is all we can venture to offer. Unable to appease, it may yet prove sufficient to keep up the interest in Magnus's life until a fuller biography will do more ample justice to his merits.

Heinrich Gustav Magnus was born on the 2nd of May, in the year 1802. Four years later, Berlin, his native town,