

Now tuberculosis is domesticated among us, and the dramatic and absorbing features of a more rapidly fatal and readily acquired disease are wanting; so that, while we are busying ourselves in the humane and worthy effort to help the stricken individual, the spread of the disease among more vulnerable persons goes steadily on, and systematic efforts towards the prevention of the distribution of infective material are almost completely ignored.

Let all the conditions which Hambleton and others urge — mistakenly, I think, as the cause of the disease — be fully considered and guarded against; let climatic, hygienic, and hereditary influences be made as favorable as possible; and let the influence of drugs be brought to bear whenever and however they safely and to good purpose may. To attend to these things is the duty of the physician. But beyond and above all this, is the problem of the total eradication of the disease. Its practical solution may and probably does lie far in the future; but it would seem unquestionable, in the light of modern science, that any systematic and intelligent effort in this direction must be based first of all on the universal recognition of the fact that a particular species of bacterium, and it alone, causes tuberculosis, although there are hosts of most important external and internal conditions which favor or retard the progress of bacterial invasion.

T. MITCHELL PRUDDEN, M.D.

New York, May 23.

#### Bassariscus, a new generic name in mammalogy.

Having lately had occasion to do with the quadruped commonly called *Bassariscus astuta*, my attention has been drawn to the fact that the generic name is pre-occupied in entomology. It is said to have been conferred by Hübner upon a genus of lepidopterous insects, 1821 or earlier. There being no synonyme of the mammalian genus, that I know of, a new name for the latter seems to be required. The above may be regarded as a diminutive of one of the several forms of a Greek word meaning fox, and the two species of the genus may be known as *Bassariscus astutus* and *B. sumichrasti*. The English equivalent would be 'bassarisk,' a term which may come into use, since we have not yet any single word in the vernacular as the name of the animal. As to the technical name of the family of *bassarisks*, it may be observed, that, if *Bassariscus* be untenable in this connection, then so is *Bassarididae*. The first tenable generic name in this family is doubtless *Bassaricyon* of Allen, 1876, whence it would appear that the proper name of the family is *Bassaricyonidae*.

ELLIOTT CORES.

Smithson. inst., Washington, May 14.

#### A needed invention in coal-mining.

In recommending air-jigs for separating coal from slate, I fear that Mr. Ludlow (*Science*, May 13) is on the wrong track. Two solids are readily separated by a fluid whose specific gravity is intermediate between theirs: the heavier sinks, the lighter floats. But if, as is usually the case, we must employ a fluid lighter than either, the heavier that fluid the more ready and complete the separation: hence the enormous disadvantage under which air suffers as a separating medium. Air-jigs, too, would probably break the coal much more than water.

Coal initially dry would suffer an apparently irreparable injury from absorption of water, if separated by wet jigging; but, for coal initially wet, means for using the waste water over and over appear to offer a more promising field than air-jigs.

HENRY M. HOWE.

Boston, May 17.

#### A noteworthy specimen of Devonian lepidodendron.

A noteworthy specimen of Devonian lepidodendron (*L. primaevum* Rogers?) has recently been added to the New York state museum of natural history at Albany. It is fifteen feet in length from the roots upward, measures thirteen and a half inches in diameter across the base, three inches at the broken upper extremity, and preserves in great beauty and perfection the cicatrices of the leaves, in places the narrow elongate-lanceolate foliage and the delicate rootlets.

The fossil was discovered in the Portage arenaceous shales of Naples, Ontario county, N.Y., by Mr. D. D. Luther of Naples and Mr. J. M. Clarke of Albany; and a portion of it, as much as had at that time been excavated, was described in Bulletin No. 16 of the U. S. geological survey. The continuation of the excavation added greatly to the length of the specimen, and exposed its base and roots. The trunk has been flattened in the shales and its tissue reduced to coal, but in its present condition it undoubtedly offers to paleo-botanists one of the most striking examples known of this genus of plants. It is interesting to observe, that, so wide a variation exists at different distances from the base in the arrangement of the cicatrices, one cannot but feel, upon examining the fossil, that, if it had been found in fragments taken from different spots, it would furnish all the necessary material for a half-dozen distinct species of lepidodendron, according to prevalent methods of determining these values. Moreover, towards the base the leaves are uniformly arranged on elevated longitudinal ridges, as in *Sigillaria*, showing nothing of the quincunx arrangement apparent higher up, and regarded as a diagnostic character of lepidodendron. In this region also the longitudinal ridges are interrupted by a series of varices suggestive of an equisetaceous mode of growth.

While it is to be regretted that the summit of the tree has been lost, it is a fortunate circumstance that preserved to science so fine an example of Devonian forest-growth.

C.

Albany, May 18.

#### The Sonora earthquake.

In the report of the earthquake sent you a day or two ago, I think an error was made in the time stated. It should have been 2.48 local time, and 2.13 standard. Additional data and information are at hand, which I have not had time to carefully consider, but which only confirm my previous assertions. There was no great loss of life anywhere, all reports to the contrary notwithstanding. The central area of disturbance was about the Fronteras valley, and likely due to faulting. No *eruptive* disturbance has reliably been reported, and I can only iterate my previous assertion concerning volcanic action.

G. E. GOODFELLOW.

Tombstone, A. T., May 14.