

We could cite several instances of sudden deaths in the pig which veterinarians have declared to be due to measles, whereas this name has been applied by the better informed exclusively to that speckled condition of the skin due to hydatids beneath it, and which hydatids—all members of the genus *Cysticercus*—pervade the soft tissues in the body, and if swallowed uncooked, produce tape-worm in man. This fact alone proves the importance of knowing more than is usually done regarding pig diseases.

We have recently discussed the injurious effect of overfeeding horses, sheep and cattle. We can furnish an admirable illustration of the *plethoric* state in pigs. Our readers must not forget that *plethora* signifies that condition of the system when the blood is in excess both as to quantity and richness; but chiefly the latter. A brewer in Edinburgh kept a few young pigs to supply himself with choice morsels of pork and ham. During the past winter on a showery day, the pigs were declared to be trembling, foaming, and fuming. All, without exception, manifested symptoms of disturbance, varying in severity, but the best were most dangerously ill. Three died in rapid succession, and advice was sought. The poor pigs had received an extra rich supply of food, containing a heavier proportion of good barley than they were accustomed to; their high condition would not admit of such an addition to their supply, and they were thus destroyed. Our readers will perhaps remember the instance before recorded of high fed cattle being killed by a too liberal supply of the best oil-cake. It is a parallel case to the one here mentioned among the pigs.

It is evident that moderation in feeding, and perhaps an occasional dose of medicine, are as essential for the health of the pig as for that of other domestic quadrupeds.

BOTS IN HORSES.—The editor of the *Indiana Farmer* says he publishes a receipt for the third time, by special request of those who have used it with perfect success. It is as follows:—

“Take a tablespoonful, a little heaped, of alum, and the same quantity of copperas, pulverize them fine and put them into a pint of vinegar. Pour it down the horse's throat. It will generally afford relief in five or ten minutes.”

Miscellaneous.

Historical and Scientific Facts about Petroleum.

Within the last three years there has sprung up in this country an important and extensive branch of industry—the refining of petroleum,

or, as it is sometimes called, a mineral oil. It is already a staple article, and its use as an illuminator, is becoming every day more extensive. When properly manufactured it is not explosive; it affords a brilliant flame, it can be furnished at a moderate price, and, moreover, its sources of supply in this country are abundant. The subject is one of so much general interest that we are induced to publish the following interesting article concerning this substance, which was sent to us by a member of the Chemical Society, Schenectady, N. Y.:—

Petroleum is not of constant composition, but is a variable mixture of numerous hydro-carbons, as benzole, naphtha, kerosene &c., with paraffine, naphthaline, and asphaltic solid hydro-carbons. It is of a very dark greenish-brown colour, and its density varies from a thin oil lighter than water, to a thick viscous oil heavier than water. The lighter qualities contain the larger proportion of burning oil.

The evidence of the most ancient occurrence of petroleum is among the ruins of Nineveh, whose existence dates back more than two thousand years before the Christian era. In the construction of this city, an asphaltic mortar extensively employed, the asphaltum being obtained by the evaporation of petroleum.

A later mention is found in the account of Babylon, whose walls were cemented with asphaltum, which was poured, in a melted state, between the blocks of stone, and an indestructible mortar thus secured. This asphaltum was procured from the fountains of Is, which were one hundred and twenty miles above Babylon, on the Euphrates. Together with saline and sulphurous water, it issued from a rock and was conducted into large pits. The oily matter was then skimmed off and solidified by atmospheric evaporation. These springs, from the abundance of their products, attracted the attention of Alexander, Trajan and Julian, and even at the present time, asphaltum procured from the springs sold in the neighbouring villages of Hitz.

From time immemorial asphaltum has been found on the shores of the Dead Sea, and one of the most remarkable localities for it is at Golan, as is well known, is of supposed volcanic origin; and is the probable site of the ancient cities of Sodom and Gomorrah. Its surface is about one hundred feet below the surface of the ocean. It has been fathomed to the depth of two hundred and fifty feet. In several places no bottom has been reached, and, owing to internal convulsions, the depth changes from time to time. The asphaltum is very dense, holding in solution twenty per cent. of solid matter, of which seven per cent. is bituminous substance. It is up-thrown from below and towards the centre of the sea in a liquid state, like petroleum; but it is gradually solidified by evaporation, as it is upon the shores in hard compact masses. The explanation of this phenomenon is that