

45. *Materia Medica Animalium Indica.*

By DAVID HOOPER.

Workers on Indian *Materia Medica* have paid more attention to drugs of vegetable origin than those of the animal kingdom. One reason for this neglect is because drugs of the latter class form a small proportion of those in general use. The present paper is an attempt to bring these materials together in a classified form, to state their properties as far as they are known, and to give their composition where this has been ascertained. The following works among others have been consulted in compiling the list, and notes from correspondence in the Office of the Reporter on Economic Products, Indian Museum, have been utilised:—

Ainslie's *Materia Indica*, 1826. Irvine's *Topography of Ajmeer*, 1841. Honigberger's *Thirty-five Years in the East*, 1852. Baden Powell's *Punjab Products*, 1868. *Pharmacopæia of India*, 1868. Sakaram Arjun's *Bombay Drugs*, 1877. U. C. Dutt's *Materia Medica of the Hindus*, 1900. Khory's *Materia Medica of India*, 1908. Watt's *Dictionary of the Economic Products*, 1889-1893, and *Commercial Products of India*, 1908.

Many substances such as the flesh of animals and charms worn on the person to prevent disease are omitted from the list. Galls produced by insects have not been enumerated as it is considered more appropriate to deal with them as vegetable structures under the name of the trees upon which they are formed. The present list of animal drugs therefore includes, as far as possible, those that are recognized by Hindu and Muhammadan physicians and sold in the bazar. I have to acknowledge the valuable help I have received from Dr. N. Annandale in identifying specimens and for supplying information on many of the products.

PROTOZOA.

NUMMULITES ATACICUS.

These button-like fossils are sold in the drug bazar of Lahore under the name of *sangh nadh*.

In Baden Powell's "*Punjab Products*" the following fossils are enumerated:—

Sang-i-khurus, a fossil encrinite (Echinodermata).

Sang-i-irmali, a fossil (Echinodermata).

Hajr-ul-yahudi, encrinite.

The oil has the following constants :—Specific gravity at 15°·921 ; Acid value 21·36 ; saponification value 198·8 ; iodine value 106·9 ; Reichert-Meissl value ·71 ; Fatty acids per cent. 94 ; melting at 25·5° ; neutralisation value 205 ; iodine value 116·5. The solid fats consist chiefly of palmitin ; no spermaceti is present.

UNGULATA.

RHINOCEROS UNICORNIS, Linn. The Rhinoceros.

Linschoten devotes a chapter to the value of the various parts of this animal. He says : “ Their horns in India are much esteemed and used against all venime, poyson, and many other diseases : likewise his teeth, claws, flesh, skin and blood, and his very dung and water and all, whatsoever is about him, is much esteemed in India, and used for the curing of many diseases and sicknesses, which is very good and most true, as I myself have found.” In *Taleef Shereef* (translated by Playfair, 1833) rhinoceros flesh and smoke from the horn are highly praised. The horn, assumed to be that of the unicorn, had virtues ascribed to it in Europe up to the seventeenth century.

The urine from the animal preserved in the Zoological Gardens, Calcutta, is in great demand to the present day as a tonic for the treatment of enlarged spleen. It was analysed by Col. L. A. Waddell in 1893 (*Indian Medical Gazette*, May), who found it to be alkaline in reaction to have phosphates in abundance.

The dried blood of the Rhinoceros (*R. sondaicus*) is used in Moulmein as an important medicine under the name of *Kyan thwe*. The blood is dried in the gut of the bowel and resembles black pudding. The price is one rupee per tical or one rupee in weight. It is valued by Burmans and Chinese. In the Mandalay drug shops a substance similar to congealed blood is sold as a substitute for the more costly rhinoceros blood. Its origin could not be ascertained.

BOS INDICA The Cow.

Vern. :—*Gao-lochan*, Hind. ; *Korashanum*, Tam. ; *Hejr-ul-bucker*, Arab. ; *Gowzerch*, Pers. ; *Gorochana*, Sans. The biliary calculus of the cow or ox.

These secretions are found in the gall bladder of cows and oxen in India. They are of the size of a large marble and of a bright yellow colour. They are considered valuable in certain indispositions of young children, accompanied with acidity and deficiency of bile ; they are besides reckoned cordial and alexipharmic, and useful in abortion and diseases supposed to be caused by evil spirits.