

NATURE RAMBLINGS

By FRANK THONE

Natural History



Ratel

Most animals, even the formidable predators that are well able to look out for themselves in a fight, are darker colored above than they are beneath, as though to blend into the general color-scheme of the landscape. But the ratel, the African equivalent of our American badger, defiantly reverses this all but universal natural camouflage, and wears a broad mantle of light gray over the top of his head and clear down his wide back.

It may be that this should be considered an example of what naturalists sometimes call "warning coloration," for the ratel, like the badger, is one squat, powerful, trundling package of truculence. He goes about his business on his four short legs at a hard trot, following his nose undeviatingly and yielding the road to nobody whatever. With him the old warning *cave canem* is reversed to *caveat canis*: he will beware of no dog; let the dog rather beware of him. And that goes for hyena and jackal and snake as well. Highly efficient teeth and claws backed by powerful muscles, with all but impenetrable hair as an armor, will make the defiance good against all comers.

Like many another dour and doughty fighter, the ratel has a most ridiculously sweet tooth. He feeds on insects and eggs and small animal life of all sorts as a routine matter, but let him get sight or scent of a bee tree and he forsakes all else to attack it. He rips into the rotten wood with powerful claws, regardless of the furious but ineffective attacks of the enraged insects, and proceeds to gorge himself on the comb and the succulent masses of bee larvae within.

Science News-Letter, March 24, 1928

Firemen Revive Babies

Physiology

The time-honored custom of spanking a new-born baby who fails to cry and so start his breathing apparatus to working, is all wrong, according to modern physiology.

Such methods are not only ineffective but positively harmful, in the estimation of Dr. Yandell Henderson of the laboratory of applied physiology at the Sheffield Scientific School of Yale University.

"Resuscitation of the new-born should be based on the modern conception of the regulation of respiration by the action of the blood gases on the respiratory center," declared Dr. Henderson in a severe indictment of the traditional technique for resuscitating babies reported to the American Medical Association. A baby's failure to cry, the physiologist explained, is due to prolonged pressure on the respiratory center in the brain received during birth. When he has taken an unduly long time to be born it requires chemical stimulation of that part of the brain that controls breathing to start this necessary life process. The natural stimulant of the respiratory center is the carbon dioxide carried to the brain by the blood. Consequently, the logical procedure is to supply carbon dioxide mixed with the oxygen needful to all higher animals, by means of an inhalator. The principle upon which such an apparatus is based is exceedingly simple, Dr. Henderson continued, so that there is no reason why an infant's inhalator could not be made that would slip easily into a physician's overcoat pocket.

The use of inhalators in resuscitating babies has already seen considerable practice, Dr. Henderson pointed out, by the rescue squads of city fire departments. Hospitals confronted with an emergency when the usual methods have failed call on the rescue squad who come in with their inhalators and start the baby breathing. The fire department of one city now reports a large number of such "rescues" in little more than a year, the scientist declared.

The way in which this has come about can usually be traced to some physician who has witnessed the effective rescue of a gas asphyxiation case by the inhalators of the fire department. Some time thereafter he delivers a baby that cannot be made to breathe by all the ancient practices, and he calls the fire department. If the latter succeeds where he has failed,

as frequently happens, he calls them again the next time.

"Now the hospitals in some cities," added Dr. Henderson, "are adopting the practice of calling for the inhalator of the fire department whenever they have a baby who breathes poorly. In effect, they add the rescue crew of the fire department to their board of consultants. Obviously, it is the hospitals that should be equipped to treat asphyxia—asphyxia of every form—and thus to help firemen overcome by gas and smoke, instead of relying on the fire department to help the hospital in such a matter as asphyxia of the new-born.

"It is certainly an unfavorable comment on the art of midwifery that obstetricians do not as yet seem to have availed themselves of an acquaintance with the modern physiology of respiration or have provided themselves with the simple means necessary for putting it into effect. From such estimates as I can obtain, this apparatus would make a difference of one life in a hundred, and it must be kept in mind that birth is a hazard through which all must pass. Thus, if this estimate is correct, the total number of lives to be saved by the introduction of such simple and easily practicable means would be greater than would result from the complete elimination of some of the diseases of infancy and childhood, such as poliomyelitis and epidemic encephalitis."

Science News-Letter, March 24, 1928

Ancient Salt Mines

Archaeology

Salt mines that were operated on an extensive scale, with very "modern" shafts, tunnels and drifts, more than 500 years before Christ, have lately been explored near Hallstadt, Austria, by Adolph Mahr of the Vienna State Museum. In addition to knowledge of the mining methods of these prehistoric men of the early Iron Age, the exploration yielded also numerous articles of leather and wood, well preserved against decay during the ages by their burial in salt. These finds included pick handles, torches, wedges, mine timbers, felt caps, shoes of wood, leather and felt, leather hand-protectors and many other articles.

The exploration was backed by two Americans, Prof. F. W. Bade of the University of California and Major Gotshall.

Science News-Letter, March 24, 1928