

TORNADOES AND CYCLONES.

WILLIS L. MOORE.....THE INDEPENDENT.

A sharp distinction should be made in the designation given these phenomena, which are entirely dissimilar in their manifestations. The terms are now generally used erroneously by the press.

The tornado is a sudden outburst of wind in an otherwise quiet, sultry atmosphere; it is ushered in by a loud, indescribable roar, similar to a continuous roll of thunder; its path is very narrow—seldom more than 500 feet wide at greatest destruction; it moves generally from southwest to northeast, and rarely extends more than twenty miles; it very often rises in the air, to descend again at a point a few miles ahead; it is always accompanied by thunder-storms, with often a bright glow in the cloud; this cloud has usually a funnel shape, which appears to be whirling, though some observers have described its appearance like that of a huge ball rolling forward. A tornado may be considered as the result of an extreme development of conditions which otherwise produce thunderstorms.

A cyclone, on the other hand, is a very broad storm, oftentimes 1,000 miles in diameter, and sometimes can be followed half around the world; the winds circulate about it from right to left, or the way one turns clock hands backward (in the Southern Hemisphere this motion is reversed). The air pressure always falls as one approaches the centre, where, at sea, there is a portentous calm, with clear sky visible at times. The cyclone winds often rise to hurricane force, but are not to be compared with the extreme violence of the tornado, before which the most solid structures are razed.

The French term *trombe* or *tourbillon* describes almost exactly the tornado, which term was first applied to severe squalls, with funnel-shaped clouds, experienced on the west coast of Africa, and which to this day, inspire the utmost fear in the minds of the natives.

A LIVING FOSSIL.

THE AFRICAN MUD FISH....WESTMINSTER GAZETTE

Among the most ancient of animals still inhabiting our planet is the so-called mud fish (*Protopterus*) of Africa—a creature worthy of our respect, if only in

consideration of its vast antiquity, which dates far back in the early ages of the world. Of popular interest, the most striking feature of the mud fish is the possession of lungs as well as gills. On the approach of the dry season, in its natural haunts in Central Africa, the mud fish hollows out a chamber in mud, and enters upon a period of rest extending over many months, during which time it is without access to water and breathes air only. While in the mud these fishes may be dug up, and survive even after a journey across the world in the dry state, Professor Denny of Firth College, Sheffield, England, received a short time ago one of these mud blocks. In the presence of the students the hard block was placed in warm water, and after being thus exposed for nearly two hours, the fish, which went to sleep in tropical Africa many months ago, awoke and came forth from its temporary sepulchre to find itself in a bath of tap water in the biological laboratory of Firth College, where it is now alive, and, doubtless, happy.

HOW NAILS ARE NAMED.

FROM PRICE, SIZE AND WEIGHT....LOUISVILLE STAR.

Two accounts are given of the origin of the terms "sixpenny," "eightpenny," "tenpenny," and so on, as applied to the various sizes of nails. According to one statement, when nails were made by hand the penny was taken as a standard of weight, and six were made to equal the weight of a copper penny. This explanation is open to criticism on account of the very small size of the nails, of which six were needed to balance even the large sized, old fashioned copper penny. Others are much more probable. One explanation holds that tenpenny nails originally sold for tenpence a hundred, sixpenny nails for sixpence a hundred and so on, the smaller nails selling for the lower price. Another explanation is that 1,000 nails of the tenpenny size used to weigh ten pounds, 1,000 of the sixpenny size, six pounds, and so on for other sizes. Of the ordinary sixpenny nails there are eighty to the pound; of the eightpenny there are fifty; tenpenny, thirty-four; twelpenny, thirty-nine.