

I expect they will not
emerge from the comely
state until the summer.
It will be interesting
to examine your skin
of every kind to ascertain
if they are infested
with depoptera etc.
The only specimens to
the British Museum
before these from South
America can take from
an etc. I had my skin
with upon horses which
perhaps were the cause
of their death.
I seem to write under
a worn way day.

I remain
Yours most sincerely
V. Manual - Mexico

Ans'd.
Jan. 2/96.

(L1969)

WHATCOMBE,
BLANDFORD.
—AND TELEGRAPH—

Dec 31 1895

My dear General Pitt Rivers

I am writing
you a line to say how
much we hope that
you and Mrs Pitt Rivers
may have a most
happy 1896 and that
you may thoroughly
enjoy the falmur of
Rushmore Berridge
I have heard nothing of
you for a long time and
trust you are far from
the South this charming
weather has inflicted

upon no materials. I
have been surprised lately
in looking out the history
of the birth & parentage
of a fly which is found
in large numbers a than
had, but which ^{has} I believe
never before been recorded as
found in England. After
several vain attempts to
reproduce it alive I succeeded in
doing so in a 10 days by
feeding it upon a piece
daily. In their short interval
I have now upwards of
50 pupae. The development
of which will be a matter
of some curiosity, as they
will require warmth
equal to what they receive
from their host. This cannot

well be supplied artificially
I run the risk of success by
keeping them in a bottle with
large pieces of Roe Deer skin
with the fur on - on the chimney
piece where a fire is kept
all day. I have followed the
advice of the books of the
art of the present moment
with the intention of
to wings & quills it may
lead to them. It may be
the cost of the deer. I have
found them in October copulating
and now the pupae are just
done they are nearly of
uniform size and do not
vary from their first extraction
The abdomen of the females
are strong & flat at the 25th
with many plates



DORSET NATURAL HISTORY AND ANTIQUARIAN FIELD CLUB.

Meeting at the County Museum, December 13th, 1895.

[Reprinted from the *Dorset County Chronicle*, Thursday, December 19th, 1895.]

The President read the following paper :—

When examining a series of Purbeck fossils which the County Museum had recently acquired through the generosity of the trustees of the Corfe Museum, I observed the casts or moulds of a large three-toed animal impressed on two slabs of Purbeck stone, each measuring twelve inches in length, covered with coarse tortuous fuoid-like markings. Similar impressions are not unfrequently seen in the Wealden beds, and were thought by former observers to have been made by birds as they traversed the muddy shores of that period. The abundant remains of iguanodon and other dinosaurs subsequently led to the now generally accepted opinion that they are the footprints of these gigantic reptiles. Ichthyology, so denominated by Dr. Buckland for fossil foot-tracks, is a very interesting branch of palæontology, and one which has attracted the attention of British, German, and American geologists. In Vol. XI. of Transactions of the Royal Society of Edinburgh, 1828, Dr. Duncan refers to foot-tracks in the trias of Dumfriesshire in several successive strata; some in the trias at Heldbergshausen, Saxony, have been recorded in 1834. The prints of the fore-feet of some were 8½ in. long and five broad, those of the hind-feet were four inches long and three broad. Sir Richard Owen was then investigating the gigantic Batrachians of the trias, and thought they were made probably by *Labyrinthodonts*, gigantic palæozoic Batrachians. In 1851 Mr. G. P. Serape found abundant foot-tracks of small animals in the Forest-marble near Bath. Between the years 1850 and 1854 Mr. Buller found a series of impressions of gigantic tridactyle foot-tracks throughout an extensive series of Wealden rocks, exposed on the cliffs between Hastings and Pevensey. Numerous as they were, each block did not show more than two or three impressions, all of which were tridactyle. That of the inner toe was the shortest and the middle the longest. None showed any phalangeal division, owing probably to a thick padding of the sole. It is to be regretted that a sufficient series could not have been traced to ascertain the length of the strides and the probable mode of progression. Professor Hitchcock, who gives valuable information of the foot-tracks found in the Connecticut Valley, United States, the great majority of which were tridactyle, and which are now generally referred as the European tracks, to *Dinosaur*, bones of which have been found in the same beds. These prints vary in size from quarter of an inch to 20 inches in length, some showing a stride of four feet. Many thousands of these tracks have been exposed. Professor Hitchcock recognises as many as 50 species, some of which must have been of gigantic size. Their mode of progression was not by bounds or jumps as with kangaroos, but by alternate steps, the right and left feet moving in two parallel rows, not in a line as birds. The tracks show a large expanse of foot, a necessary provision for an animal of such enormous size and weight to prevent it from sinking into the morasses and bogs through which it roamed for food. How these foot-tracks have been preserved is a subject for enquiry. It is evident they were made when the ground was soft and impressible, and under conditions rendering it capable to retain the impressions, which would be the case if the ground was sandy and not coherent; otherwise they would be speedily obliterated by the calcareous atoms diffused in the superincumbent water, and if made on subarid soil they could not have escaped defacement. There are two beds of Wealden sandstone in Swanage Bay separated from each other by about two feet of clay, in which several tridactyle footprints have been found. These two blocks which bear the foot-tracks come from the *Corbula beds*, which are

higher up in the series than the *Feather-bed*, in which the jaw of the iguanodon was found, described and figured in the Paleontological Society's publications by Sir Richard Owen. The casts of the impressions of the feet are well shown on the blocks. The middle toe measures seven inches in length and five inches in breadth, diminishing upwards to a broad obtuse point. The exterior toe is six inches in length and four inches in breadth; the interior toe is five inches in length and three and a-half inches in breadth. Both, like the exterior toe, diminish upwards to a broad obtuse point. The junction of the exterior with the middle toe is lower down in the foot than that of the interior toe. Although the Purbeck beds have yielded many reptilian remains, the evidence of *Dinosaur*s is very scarce, being confined to the lower jaw of an iguanodon from the *Feather-bed* of the middle Purbecks, which is very prolific a fossil *turtle* and *fish*. In 1822 Dr. Mantell was the first to find some isolated teeth in the Wealden of the Tilgate Forest, which he named iguanodon from their resemblance to the iguana now living. In 1834 a large slab of sandstone, now in the British Museum, was found in a quarry near Maidstone, on which were several dorsal and caudal vertebrae, portions of the fore and hind limbs, the clavicle, and the impression of a tooth. In the year 1857 Mr. Beekles exhibited at one of the meetings of the Geological Society the foot of an iguanodon from the Wealden with the three toes characteristic of the family. This modification of the hind-foot is analogous to the tridactyle hind-foot of the rhinoceros and the tapir, and in this respect are their representatives among the huge warm-blooded mammals of the Tertiary age. Although the Wealden beds of Britain and Germany had yielded a considerable number of isolated *Dinosaurian* remains, the complete osteology of the iguanodon was not established until 1878, when the coal miners of Bernissart, a Belgian village between Mous and Tournay, came upon a deposit containing fossil bones of gigantic reptiles associated with *turtle*, *crocodilian*, *fish*, and *plant* remains. They lay in a depression of the coal measures, which must have been a lake during the Wealden period. This depression was a mile and a-quarter long, 600 feet broad, and about 960 feet deep, covered over by cretaceous, tertiary, and quaternary deposits. This Wealden deposit was composed of stratified dark clays intercalated with small fragments of coal and layers of sands, encircled by a wall of detached blocks of carboniferous rocks. The fossil remains are identical with those found in the English and German Wealden beds. It is probable that this remarkable lake was in one of the lateral valleys of the main Hainault valley during the Early Cretaceous age, and that the river which drained it was a tributary. These dinosaurs and other animals which frequented its banks would in times of floods be engulfed in the swampy ground and drowned, since which time they have remained undisturbed until their discovery in 1878 by the miners of a Belgian coalpit, when no less than 23 entire skeletons were found, 21 of which belong to a new species, *Iguanodon Bernissartensis*, Boulanger, and two to *I. Mantellii*, Owen, which is smaller and probably more active, which may account for the disparity of the numbers of victims. The skeletons were lying on different levels, in alternating unfossiliferous beds. In every case, with the exception of a splendid accumulation of the bones of an iguanodon found by Dr. Mantell in the Wealden of Tilgate Forest, the remains of Wealden dinosaurs have been found as isolated bones, which may be accounted for under the supposition that as their huge bodies were borne down on the stream they became disarticulated and dropped down piece by piece to the river bed.

The Scientific part omitted