Science Rotes.

THE EVOLUTION OF A TAIL.

In the twilight of the theory of evolution the scoffer used to ask, "If man is descended from the ape, what has become of his tail?" regardless of the important facts that no scientific man ever said that men were descended from monkeys, and that men are just as well endowed in the matter of tails as some monkeys.

What we have to deal with at present, however, is not the loss of a tail, but the production of one. The particulars, taken from the pages of the *Zoologist*, are as follows : A female Manx cat produced six litters of kittens, the father being merely a common cat with an ordinary tail. The Manx cat is to be congratulated in that each litter consisted of three kittens—it makes the steps in the evolution of the tail so simple to trace and so symmetrical when tabulated.

	•	No tails.		Half tails.		Full tails.
1st litter	•••	3	•••	0	• • •	0
2nd " 3rd " 4th "	•••	2	•••	I	• • •	0
3rd "	•••	1 .	•••	2	•••	0
4th "	•••	0	•••	2	•••	I
5th "	•••	0	•••	I	•••	2
óth "	•••	0	•••	o	•••	3

In five steps there was a gradual change from three tail-less kittens to three with full tails. Each step, except that between the third and fourth litters, when a whole tail is gained, consists in a gain of half a tail.

There is a great deal that requires explanation in the above case, and a great deal, we may add, that is incapable of explanation in the present state of our knowledge. If a kitten with half a tail had grown up and mated with a common cat we should expect their progeny to possess tails something more than a half and less than full. That, we should say, is a simple case of inheritance. The actual circumstances show an evolution in kittens of the same parents, whereby the first litter entirely resembles the mother in the matter of tails, and the last litter entirely resembles the father. It is said to have been observed repeatedly that the eldest member of a family often resembles the mother more closely than succeeding members, and if we accept the principle of *telegony* this fact, if fact it is, can be accounted for. The principle of telegony is that an animal may inherit not only from his father and his mother, but indirectly (through his mother) from males to whom she has previously produced offspring. The most notorious case quoted in support of this kind of inheritance is that of an In support of this kind of inheritance is that of an Arabian chestnut mare, whose first foal was by a quagga. She subsequently bore two colts to a black Arabian horse. These colts were partially dun-coloured and striped on the legs more plainly than the hybrid. They also possessed the stiff, upright mane characteristic of the quagga. Many similar instances have been recorded in the case of various animals. Darwin expressed the opinion that there could be no doubt of the possibility of an animal inheriting from the sire of an elder brother or sister. It is note-worthy, too, that breeders and fanciers generally believe firmly in telegony; they certainly have opportunities of studying the question, although they may not always have the impartiality and open-mindedness necessary for a scientific inquiry.

It has been suggested, however, that the colts to

which reference is made above were simply reversions, *i.e.*, that they showed marks characteristic of the wild horse, and resembled their remote ancestors. That they should have been born of the mare who had previously had a foal by a quagga would, in that case, be a very remarkable coincidence, but nothing more.

Accepting the doctrine of telegony, therefore, one can justify the development of the tail in the kittens of the Manx cat. The kittens of the litters after the first had a possibility of direct inheritance from their father, and, in addition, further chances of resembling him, inasmuch as he was the father of previous litters.

Motes on Art.

INSTITUTE OF PAINTERS IN OIL COLOURS.

THE picture season has now fairly set in; to-morrow the Institute opens its doors, and the private view on Friday produced a perfect block of people and carriages all the afternoon.

As a fashion show the whole scene was extremely amusing. Violet Hunt would have contrived some altogether admirable dialogue out of the crowd of British public there assembled, quite three parts of them avowedly to meet each other, without so much as a thought of the works of art around them.

as a thought of the works of art around them. One lady amused me particularly. In the last gallery there hangs a most mysterious picture, entitled "The Lure" (T. B. Kennington, No. 361). A nude young person, with something rather odd about the foreshortening of her hips, is seated upon a desolate coast "strewn with dark ribs of wreck." A man, apparently an oriental, in the foreground, stretches his hand towards an open box, containing money; the girl smiles temptingly, and holds a jewel in her fingers. Puzzle: what is the lure? Is it the fair one, or the valuables? and to what is she, or are they, the lure? There is no danger of any kind apparent, or suggested, except by the wreck fragments; and the man has seemingly arrived on the scene overland. A shadowy skeleton hovers behind the girl, but the canvas, as a whole, quite fails to explain itself. However, it did not puzzle the lady behind me for a moment. "Why, don't yer see, *she's* the *Loor*," said she to her companion; this seemed conclusive. As usual, everything had been done for the delight

As usual, everything had been done for the delight of visitors. The chrysanthemums on the staircases and tables were beautiful, and there is a charming new departure in the catalogue way—they have stiff backs, and this is a comfort which only those who have to take notes can fully appreciate. The merit of the show, as a whole, is by no means of the highest order. There are only two pictures which will attract the public as decidedly beyond the average; one of these is by that much-maligned artist, Mr. Collier.

show, as a whole, is by no means of the influent order. There are only two pictures which will attract the public as decidedly beyond the average; one of these is by that much-maligned artist, Mr. Collier. It is called "All Hallow E'en." The young girl, robed only in her night dress, stands before her mirror, candle in hand, and provided with the mystic apple, straining her large eyes, hoping, yet fearing, to descry in the impenetrable gloom the features of her future husband, and over her shoulder there does appear a face, a hateful, evil face, but so faintly that you hardly know whether it is not the effect of your own imagination, raised by the magic of the painting.



