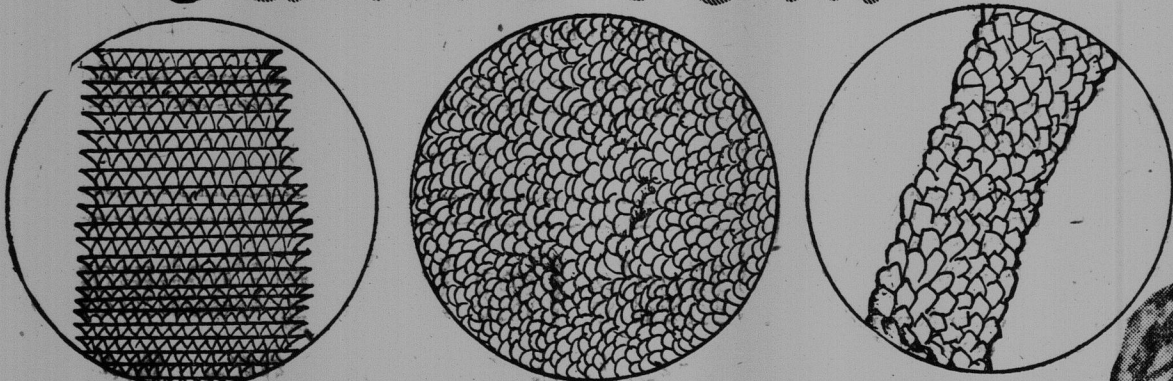


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Where Our Hair Came From



Microscopical drawings of the hair of a woman, the scale of a snake and the feather of a bird, proving that each is built up of tiny, horny plates

And the Discovery of an Astonishing Dinosaur That Proves Woman's Tresses, the Snake's Scales, the Bird's Feathers and the Porcupine's Quills Are All One and the Same Thing

TO THE lovely lady brushing her luxuriant locks before the mirror it will probably be a shock to learn that science is now sure that her silken tresses, the scales of the snake, the quills of the porcupine, the feathers of the bird and the spines of a prehistoric and particularly unprepossessing dinosaur are literally one and the same thing.

To the baldheaded man, on the other hand, it will probably be a crumb of comfort to know that in shedding his thatch he has gotten rid of certain indubitable evidence of his reptilian origin.

To the poet hair is "woman's crowning glory"; to the lover it is just a plain miracle of beauty; to the barber it is a hollow tube which he hypnotizes the uninformed into thinking can "be sealed up" by singeing so it won't bleed to death and fall out. But science, with its eye glued to the microscope, has known for a decade that a hair is just a flexible column of tiny, overlapping, horny plates about as hollow as a stack of dishes. It has, furthermore, long suspected it to be only a variation by nature of the skin of the serpent, the shell of the turtle, the plumes of the winged peoples of the air, and with its coloring due to exactly the same causes that make the diamond-back rattler the deadly blondest of its family and the bird of paradise the Beau Brummel of the feathered races.

By the discovery of the complete fossil of a most spectacular dinosaur, a prehistoric monster that lived on the Isle of Wight all of 100,000,000 years ago, all these suspicions of science have been confirmed and it is now able to tell you exactly where we got our hair and how. The reason for the belated announcement, just published in the English scientific journals, is almost as curious as the discoveries themselves.

It seems that Dr. D. W. S. Watson, who is the foremost British expert in such matters, had the study of the dinosaurs in hand. He had barely time to christen it Polacanthus—meaning "many spined"—before the ex-Kaiser started marching his troops into Belgium. Dr. Watson, who is no relation, by the way, of the Boswell of the famous Sherlock Holmes, and who, indeed, can deduce more from one fossil tooth than Doyle's super-detective could from a hundred sets of modern false ones—Dr. Watson happened to be also the best swordsman in England. The military authorities therefore took him from his laboratories and set him to work training soldiers to cut up the Germans scientifically.

None of Dr. Watson's colleagues would touch the dinosaur, because that would not have been ethical. Hence Polacanthus had to stay on the shelf until the war was over.

As soon as the armistice was signed Dr. Watson went back to his Isle of Wight fossil. The results of his study of it since then have given it the title of "the father of hair," since it was the first creature with a hair upon earth!

It has proven that science was exactly right in thinking that Mary Pickford's curls, the fur of animals, the scales of serpents, quills of the porcupine, plates of the turtle and the armadillo and the

plumes of the birds and a host of other interesting things are exactly the same thing in the last analysis. Quite a lot of information to come from one 100,000,000-year-old fossil!

This dinosaur Polacanthus carried on its hide the whole evolutionary process of hair making. It had great plates for armor. These plates were made up of all kinds of scales. These scales in turn changed in places into spines, the spines here and there softened down into quills and the quills into coarse hairs. Polacanthus, in fact, carried on its back the whole hair factory was a living illustration of how the hair developed from the huge, coarse plates that guarded its vital organs.

Now, while the dinosaurs were originally not included in the line of direct descent of man and mammals, it is a

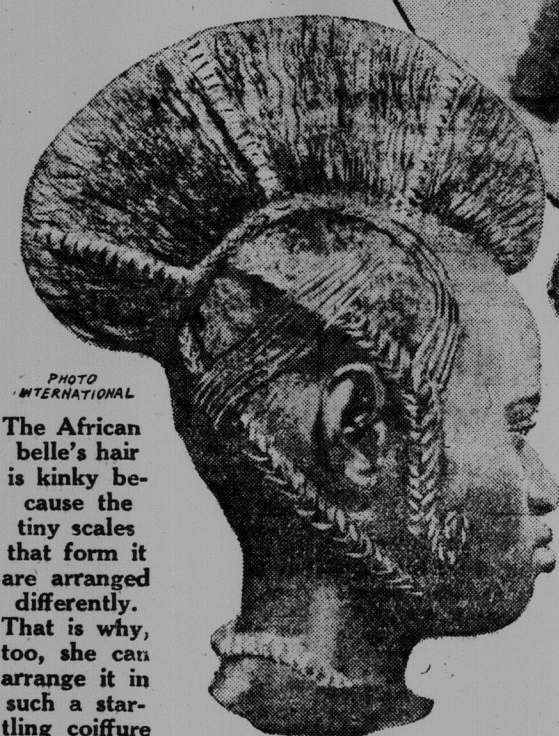


PHOTO INTERNATIONAL
The African belle's hair is kinky because the tiny scales that form it are arranged differently. That is why, too, she can arrange it in such a startling coiffure as this

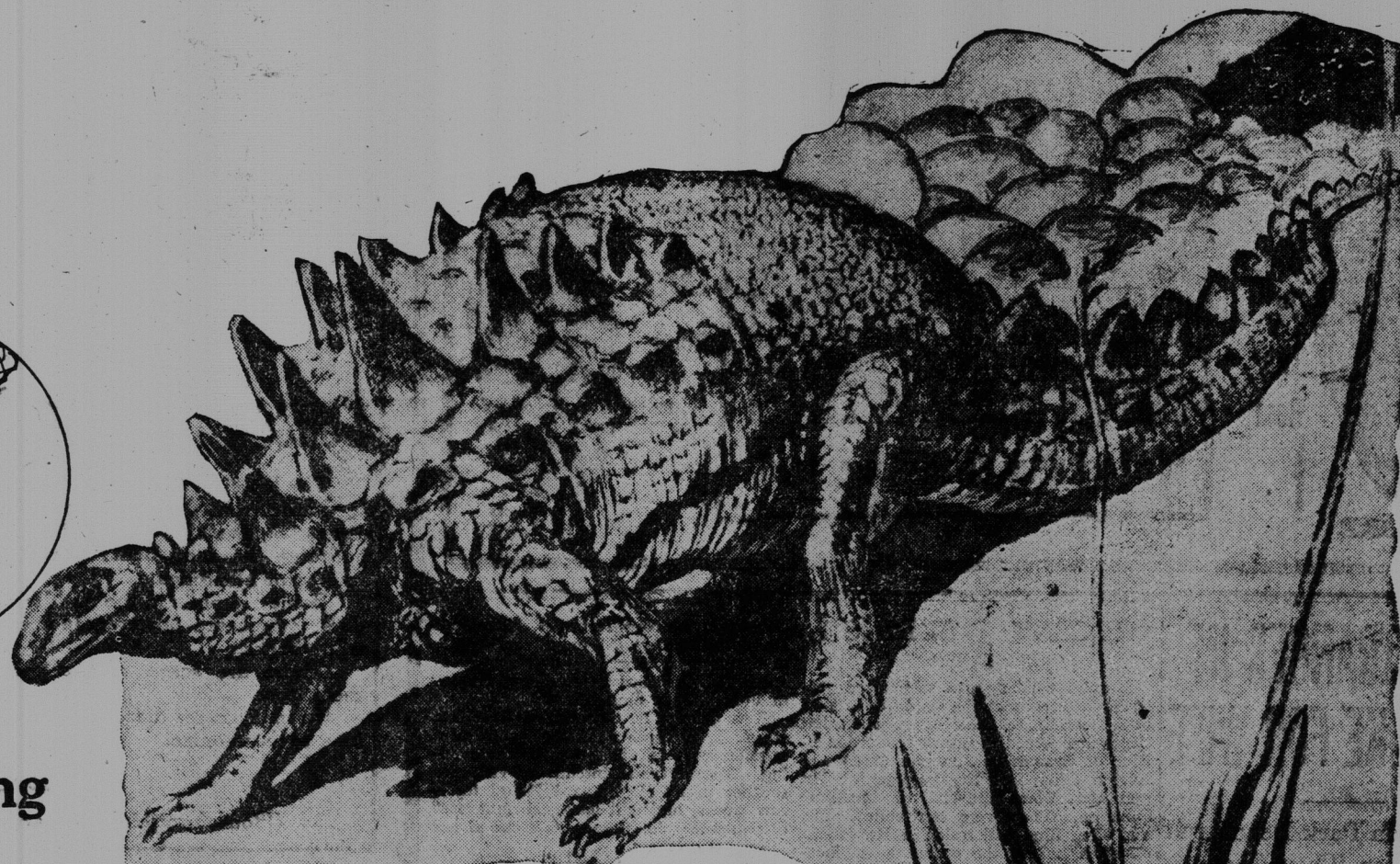
fact that more and more scientists are coming to think that some way, somehow, they stamped their characteristics on all living things! In other words, science is slowly and reluctantly admitting the reptilian monsters to the shade of the family tree of man. There is no doubt, of course, that the birds came from them. The peculiarities of Polacanthus have done much to insure their place in the immemorial temples of our heredity.

From the study of him it now seems

that our hair came about this way: First, there was a reptilian ancestor with huge plates for skin. Through certain causes some of these plates became smaller and changed in shape. Between them then began to grow short spines or quills. All these plates and spines were, however, made up of horny scales. And again, after a long while, millions of years undoubtedly, these spines grew longer and thinner and became coarse hairs.

When the mammals began to evolve,

Looking at Mary Pickford's pretty curls, the admiration of millions, you would not think that they are just the same stuff as bird's feathers and snake's scales are made of. But science says, like every woman's, they are!



The Polacanthus dinosaur, which roamed the swamps 100,000,000 years ago and was the first creature on earth to have hair

bounds like the gliders which give speed to the aeroplanes, gradually changed their scales into the form of feathers.

The porcupine and his kind, specializing in self-defense, did not let their spines fine down into the hairs which would be useless to them to keep off attack.

The turtle and armadillo found the old plates perfectly satisfactory and kept themselves hairless.

This process of specialization, as the evolutionist call it, went on through the whole mammalian species. The arrangement of scales that make up the fur of every animal is different.

And the scales that make up the hair of the Caucasian belle, the African beauty, the yellow and the brown charms, are just as different.

The lens reveals not only the race of the woman to whom the hair belonged, but also her nationality—geographically speaking—by the varying arrangement of these microscopically small scales, which are what the ancient reptilian armor plates have shrunk to!

Of this dinosaur Polacanthus only one specimen exists. The fact that it lay imbedded in the shaly clay beds of the Isle of Wight explains how its outlines were enough preserved to warrant such minute observations. It is thus described:

"Probably not much over three feet high, walking on all fours, and probably not much over twelve feet in length. Its strongly marked bones with their large joints speak of immense muscular power. The shortness of limbs and the welding of joints and sacrum into a long, flexible rod suggest an absence of agile, lithesome movements. He was, apparently, a slow, vegetable feeder. The specimen may, however, be that of a young dinosaur. If so, the adults were of much greater size."

Most astonished were the scientists when through their examinations to find that a strange little creature called the echidna and which lives in Australia is apparently the direct descendant of Polacanthus. The echidna

is part mammal, part bird and part reptile. It has the hairy spines of its old ancestors and a few more.

The children of the hairy dinosaur, it would seem, began to shrink in size. Just about the time the other creatures, their cousins, were changing into birds and mammals something happened that made the Polacanthus family stand still. It has stood still ever since and the echidna is what is left of it.

Dr. D. M. S. Watson, who found a colony of these strange, archaic creatures in Australia and studied them on the most intimate terms, thus describes them:

"The mother laid two little, truly reptilian eggs near the mouth of her very long burrow, where there was plenty of oxygen. She sat on the reptile eggs and hatched them, which was truly birdlike. The eggs were laid at the end of September and hatched in the middle of October. The infants came out of the shell, one-half inch long, absolutely naked. They had weak hind legs and strong forelegs, for burrowing. They grew to be two inches long in November and were ten inches long in February. There was still no trace of web between the toes. They clung to mamma in the burrow for seven months, then cast loose to go their own gait. During the seven months in the burrow, they fed on milk which leaked through the pores of the skin of the maternal pouch. The females have no breasts, like mammals which bear their young alive. The adult beak is very soft and feels like a dog's nose, yet looks like a kid glove."

The queer little echidnas and the one fossil in the British Museum are all that remains of the old dinosaur Polacanthus as he was. But his scales and spines and bristles still live in the hair upon which we expend so much admiration, care and, when it leaves us, sorrow.

The question arises, of course, as to how the echidnas got all the way down to Australia, so far from the Isle of Wight, where their direct ancestors roamed. The answer is that in those days the present oceans did not exist. One could walk from Australia to Brazil and from Brazil to Europe.

Dr. Pruner-Bey, in his *Memoires de la societe d'anthropologie*, says that there is no test that has proved, on repeated examination, to be a safer one of racial purity than the quality of hair. The hair of an individual bears the stamp of his origin, he avers.

In conclusion, here are some curious, little known facts about hair. Straight hair is the longest, woolly the shortest. In the Chinese and Indian races the hair of men grows as long as women's—sometimes nine feet. In Europeans man's hair left uncut grows on the average twelve to sixteen inches while women's grow to between twenty-five and thirty inches. The hairiest races are the Australians and the Tasmanians. Traces of a hairy tribe almost as furred as the monkeys are found among the Russian peasantry. The least hairy races are the yellow, the Indians and the Mongols.

There are no red haired races. A red haired girl is a freak, scientifically speaking. A beautiful freak as a rule, but still no less a freak. There never was a red haired dinosaur.

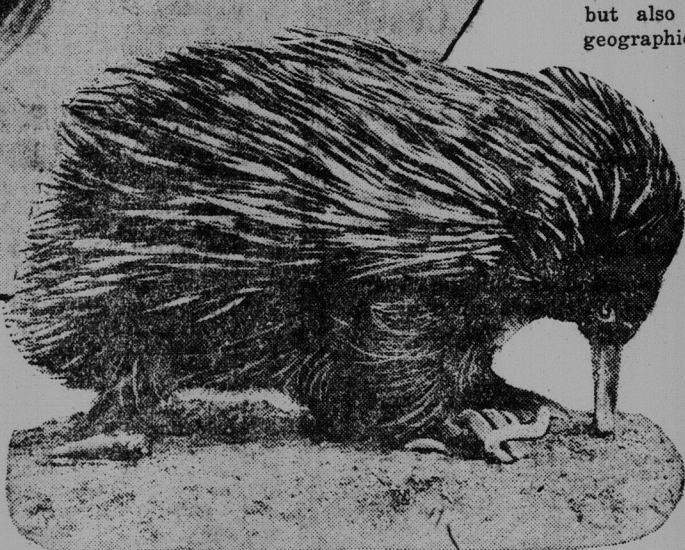


PHOTO AMERICAN MUSEUM OF NATURAL HISTORY
The Echidna, part mammal, part bird, part reptile, the only living descendant of the hairy dinosaur

the scales and plates decreased in size and the hair—which, it must be remembered, is, under the microscope, nothing but a great number of scales built up in a certain fashion—became thicker. When man finally appeared the plates of his reptilian ancestors had softened and shrunk into what we call our skin. Under the microscope this is seen to be only myriads of tiny scales which we shed continually. The reptilian spines became our hair.

The snakes, not needing hairs to keep them from their crawling habits, kept the old plates in the modified form of the scales that now cover them.

The reptilian ancestors of the birds, first taking the air by great leaps and

