

## THE TENANT.

I lived, one time, in the strangest house;  
I entered it some soft morn of Spring;  
I cannot remember the opening;  
But only, the birds began to sing,  
And the chambers one by one to rouse.  
The frontward rang from the first and gleamed;  
The inner lay in the dark and dreamed,  
Till their time should waken them too to air;  
And they were the deepest and richest there;  
One, over the rest, the mansion's throne,  
Where all its order was framed alone.

Well, years drew over my canny house,  
And the more I noted, the more I mused;  
It wore not, but grew, forever used,  
It rallied, whenever assailed or bruised,  
In toil unbending, or gay carouse;  
And those chambers widened, as of themselves,  
The halls and arches, the vaults and shelves;  
And marvels so many the closets held,  
Such law constricted and life outwelled,  
I learned to fancy, it might rehearse,  
On a stage so little, the universe.  
And ever I spent maturer care  
To hold my lodging in safe repair,  
As I strove, communing long, to find  
In that fair building the builder's mind.

But the wonder at last befell my house,  
More strange than all of the vernal prime;  
It had fitted myself, that early time;  
It was not wearied with stain or grime,  
With rift or reeling, with mould or mouse;  
But now, when so long those cares I spent  
To cleanse the blemish, to heal the rent,  
I but found, in the home I would shape so true,  
More alien every year I grew.  
It would not yield as before to me  
The instant claim of its service free;  
It vexed me without, it was gnawn within,  
I felt the old trusty joints unpin,  
With buttress the mouldered walls I propped,  
Door cumbered and thickening window stop-  
ped;  
There was ever a fall, and ever a strain  
That of old I knew not; I called it Pain;  
And all my endeavor but set it clear  
That I and my dwelling were not so near.  
However the place might fix my love,  
Resistance palled; it was time to move.  
And strange again, of my house I knew,  
But nought of myself, what would ensue!  
Yet stranger, the word of those who say  
That the two are one, as they go or stay.

GENERAL EVOLUTION AND NATURAL  
SELECTION AS EXEMPLIFIED  
BY MAN.

## PART III.

Darwin's work leads up to that transcendent question, the Evolution of Man. There may be said to be three problems for solution—viz: 1st. The Evolution of Man from some lower form of animal. 2nd. The Evolution of the different races of mankind. 3rd. Social Evolution. To all these Darwin applied the principle of natural selection, and he did not shrink from following his theory to the logical conclusion.

The evolution of man from a lower form is, of course, a necessary consequence of the general theory of evolution. It was, no doubt, the realization of the fact that caused the attacks upon Darwin and Huxley as soon as "The Origin of Species" reached the reading public.

I must explain that the theory of evolution does not entail the descent of man from any existing ape, or monkey, and Darwin specifically

pointed this out. I am very sorry to say, however, that popular opinion still insists that man is a sort of edition de luxe of the gorilla or the chimpanzee.

The truth is that man and the anthropoid apes have descended from some common ancestor, and that in the course of time, and as a result of natural and sexual selection, the branches have diverged, the termination of one branch being man, and of others the various tail-less man-like apes. While this common origin does make the tail-less apes man's nearest relatives, it does not make them his ancestors. The relationship, however, is about as remote as a fiftieth cousinship, but it is not so far removed as is the relationship between, for example, the chimpanzee and the lemur.

I am anxious to point out that, whatever views anybody may hold upon religious questions, the admission that man has been derived from ape-like ancestors by the process of evolution, cannot influence those views provided you admit—as every sane man must—that the human animal grows up by a process of development from a fertilized ovum in exactly the same manner as every other mammal.

I now wish to draw attention to the life history of man. In this case, as in the case of the frog, there exists the same sequence and the same conditions which the theory of evolution demands. A few coincidences might be explained as mere accidents; but the evidence, taken as a whole, is so overwhelming that one is fully warranted in asserting that each organism in the course of its embryological history repeats in a short period the entire history of the race.

In the embryonic history of man—and of all other mammals—there are peculiarities which, upon the hypothesis of special creation, are not explainable in the light of evolution, they are exactly what one ought to expect.

The ova of all mammals in their earlier phases pass through stages which are capable of exact comparison with those of the frog. The ovum divides, forms the germ layers, the nervous system, the notochord, and the muscle-plates in the same way. Then comes the same formation of heart and blood-vessels. In man, as in the fish, the heart is, at first, two-chambered; then it becomes three-chambered, as in the lower reptiles; and later it develops the four-chambered condition, which it retains through life. In the blood-vessels, are the same gill-arteries as in the frog or shark, running in the same direction and uniting to form the same dorsal aorta. There is the same tendency to form gill-slits upon the sides of the neck, and in exactly the same manner, as outgrowths from the

throat towards the external skin. Later, the blood vessels change, the gill-slits close up, except the first, which persists as the Eustachian tube, connecting the throat with the middle ear.

After a time the distinctly mammalian features become more prominent and there comes a time when no one can determine between two embryos which is that of a man and which that of a dog. Later, the two can be distinguished; but still there is no apparent distinction between the embryo of man and that of one of the anthropoid apes.

Permit me now to mention a few of the monkey-like characteristics of the human embryo. The great toe, instead of being longer than and parallel to the others, is shorter and extends at right angles to the axis of the foot, just as it does in the foot of the ape. At the seventh month, the convolutions of the brain are very close to those of the baboon. There is, at one period (thirty-first to thirty-fifth day) a true tail extending considerably below the coccyx of the adult. At the seventh month the entire body, except the palms of the hands and the soles of the feet, is, like that of the apes, covered with hair, the technical name of which is lanugo, and which is usually shed before birth. Even after birth the monkey-like characteristics do not disappear. The young orang-outang clings with its hands to the hair of its mother's breast, and the newly-born infant, so weak in other respects, will cling to any surface with sufficient grip to support its weight. Again, if you will watch a full-grown man, who cannot swim, in deep water, you will notice that he moves first one arm and then the other—the very thing he ought not to do—just as the apes move their limbs when climbing a tree.

In structure, the differences between man and the anthropoid apes are, of course, very great, but they are differences of degree rather than of kind.

None of the anthropoid apes walk erect with ease, and their arms are longer than are those of man. The apes possess an appposable great toe, which enables them to hold on to almost anything with their feet. Between some of the teeth of both jaws there is a space, known by the word "diastema," and into this space the tooth of the opposite jaw fits.

I hesitate to say much concerning man's brain weight because my views upon this subject have been so persistently misrepresented in the past. It is not probable that any normal adult, man or woman, has ever possessed a brain weighing less than 30 ounces; upon the other hand, it is improbable that any anthropoid ape has ever been dissected whose brain weight exceeded