

I believe, to the time when England was clad by one almost unbroken sheet of oaks and beeches, and still earlier to the time when a great belt of land connected it with the Continent from Holland to Portugal. Even the veriest Red Radical like myself may well share John Mill's hope that the spread of agriculture and political economy may never succeed in improving these dear dumb friends and pensioners of ours off the face of the earth. They are one of the beautiful links which bind us to the pre-human past; and I hope we may hand them on as part of our common heritage to those who will follow us hereafter in a higher and more human future.

Evolutionism, it often seems to me, throws a wonderful charm of this half-historical sort around every beast or bird or plant in the meadows about us. These fallow deer are no longer mere accidental animals happening to live in the park here at the present day: they are creatures with a whole past history of their own, as interesting to the eye of the evolutionist as a castle or an earthwork to the eye of an archæologist, and as a cathedral or a temple to the eye of Mr. Freeman or Mr. Fergusson. We have all been living all our lives in the midst of a veritable prehistoric Ilium, will all its successive deposits and precious relics lying loose about us, and we needed only a Schliemann to tell us what it all meant. Mr. Darwin and Mr. Herbert Spencer have read the riddle for us, and in doing so they have given us a key which will help us to unlock, each for himself, a thousand little secrets of nature that meet us every day, on our way through the world, at every turn. These fallow deer, for example, have a quite recoverable pedigree, which shows us just by what steps they have been developed from an early common ruminating ancestor; and this pedigree M. Gaudry has worked out for us in detail as admirably as Professor Huxley has worked out the genealogy of the horse, and as Dr. Mivart has worked out that of the cat.

The very earliest ruminants whose remains we meet with in the lower tertiary strata were all hornless. The resemblance in this respect a few abnormal living kinds, such as the camels, the llamas, and the alpacas, though, of course, these kinds are far more specialized in other ways than were their primitive ruminant ancestors. But as time went on, the wager of battle among the males, common to so many races of mammals, produced singular results upon the whole ruminating tribe. The nature of their food prevented them for the most part from fighting with their teeth, like carnivores, so they took to butting with their heads instead. Thus, either by accidental variations, as Mr. Darwin thinks, or by use and wont, as Mr. Herbert Spencer rather believes (with more probability, as it seems to my humble judgment), aided in any case by natural selection, almost all the ruminants grew at last to have horns or antlers of one kind or another. But these weapons of rivalry—for they are all but useless against other species—differ greatly in their structure, and therefore in their origin, between race and race. All that is constant is the presence of some kind of offensive butting instrument upon the forehead. In the bison and ox tribe, including the antelopes and goats, the weapons take the form of real horns—that is to say, of hollow permanent dermal processes; in the deer tribe, they appear as antlers—that is to say, as deciduous bony, not horny, structures; and in the giraffe they exist in the shape of permanent bosses of the skull, covered with hair and skin, but used very fiercely in combat, even in Regent's Park, where one giraffe once actually drove his horn clean into the skull of another. Only one very abnormal ruminant, the musk deer (which is not really a deer at all, but a specialized aberrant descendant of the old undifferentiated ancestral type), has weapons of a different character—a pair of curved tusks in the upper jaw, used in the

sam  
T  
lers  
Whi  
dom  
terti  
plen  
mult  
offen  
grew  
and  
erati  
ject  
Malti  
began  
the p  
strong  
rents  
natur  
protu  
the an  
took  
the  
which  
point  
quish  
the s  
desce  
liariti  
and w  
law of  
fighti  
weapo  
Nov  
priori  
with t  
prete  
Boyd  
unspe  
cene  
they v  
withou  
in the  
mid-m  
appear  
knobs  
side ti  
they c  
our m  
diate s  
mere  
ding r  
many-l