"These are, indeed, solemn processions, which not even youth and beauty, or their simulants, can make gay. The ground is well watered; no dust rises beneath the tramp of the many horses. But darkness has set in on the faces of the multitude. The moment the sun made a decided bow to the horizon, out came carriages, phaetons, and horses; but scarcely have they revolved twice in their course, ere that sun has vanished into darkness. Phebus and Nox have here a sterile union; and the sturdy long-lived Crespuscule of our southern climes is unborn and unknown here.

"It really was little more than ten minutes from the time we got on the Course, ere the darkness to me destroyed all the attractions of what, for a brief period, was a very interesting and novel scene. But imagine a drive in the dark-not twilightbut darkness so profound that lamps must be lighted to prevent collision. For the ten minutes or so it was a very gay, a very curious, but not a very satisfactory or assuring sight. I think the most stern and patrician of Roman consuls must have had something of an uneasy feeling when he saw the plebeians in the Via Sacra, presuming to walk forth in purple and fine linen among the offspring and relatives of the Conscript Fathers. But here on this esplanade, or race-course, or corso-whatever it is-there is something more than such pretentious equality. It is, that there is such insult offered as the arrogance of the most offensive aristocracy—that of complexion—can invent to those who by no means admit themselves to be the plebeians of the race. See, there is a feeble young man dressed in white, with a gilded velvet cap in his hand, trying to drive a vehicle, which looks like a beehive from the cluster of his attendants on all points of it. That is Chuck-el-head Doss, the great little young Bengal merchant, the inheritor of old Head Doss's money, and the acceptor of the less doubtful gain of a Germano-Hindoo-Christianic philosophy, which teaches him that, after all, whatever is is best, and that the use of the senses is the best development of the inner man. Is he a bit nearer to us because he abjures Vishnu, accepts Providence, and thinks our avatar very beautiful? Ask 'Who he is.' 'He's one of those nigger merchants-a cheeky set of fellows, all of them.' Then there is a morose old man in a chariot drawn by four horses, with two well-dressed fellows with their backs to the horses, outriders and runners, and a crowd of servants. He is a handsome worn-outlooking man, with a keen eye, lemon-coloured face and gloves, dressed in rich shawls and curious Who is he? A few Europeans bow to him.

"'He is the Rajah of Chose—a great rascal. None of us know him; and they say the Company were jockeyed in giving him such an allowance.' You feel some historic interest when you are shown Tippoo Sultan's son and grandson; but your friend is too busy looking at Mrs. Jones, to give much information on these points, or to direct your attention to anything so common-place (to him) as the appearance of some natives on the Course. And indeed, to tell the truth, the fair face of Mrs. Jones is, perhaps, better worth looking at, in the abstract, than those bedizened natives. Still it is striking,

for the first time at all events—but I suppose the impression soon dies away—to see the metaphysical Mahratta ditch which separates the white people, not only from the natives, but from the Eurasians. They drive and ride in the same throng, apparently quite unconscious of each others' presence."

WILD AND TAME.

THE influence of civilization upon man is chronicled in the records of history; but the influence of civilization upon certain races of animals is more obscure, and has not been taken cognizance of perhaps so much as it deserves. We all of us know something about the civilization of individual pets: it is not to that case, however, that I direct my remarks. What my observations would especially point to here is the series of gradual and more occult changes which have been brought about in the course of hundreds, sometimes thousands of years, and by virtue of which the characteristics of a race are so modified that we lose all cognizance of the wild progenitors from which the members of Already the domestic cat has it have descended. afforded the readers of "The Leisure Hour" one example of what is meant to be conveyed. Another case of similar import is furnished by the dog. Less obscure, but still well marked, are the cases of modified race, the change due to civilization, furnished by the pig, the sheep, the cow, and, perhaps more than all, the domestic barn-door fowl.

There are two ways of testing this no less difficult than interesting subject. Firstly, in some cases, historical records exist of what the characteristics of certain animals were, in ancient times when the process of reclaiming them first began; secondly, the naturalist has it often in his power to appeal to modern records, of what tame animals have become when allowed once more to run wild. Both these means of investigation are open to us, as respects the common barn-door fowl: suppose, then. we examine them. When barn-door cocks and hens began to be so inconsiderate as to abandon their native forests, and, for the sake of a little good living, to lay eggs and get fat for the benefit of their civilized but gormandizing protector, is more than naturalists, at this late period of the world's history, are able to determine; however, as regards those pioneers of civilization, the Greeks, testimony enables the inquirer to form a pretty accurate guess. In neither the "Iliad" nor the "Odyssey" does old Homer say anything about cocks and hens, which is strange, if he really was cognizant of their existence. Getting up of mornings by times to mingle in the fray, as the Homeric heroes are represented to have done, what more natural than the assumption that cock-crow should have been the signal. Neither does Hesiod (another very old Greek author) say anything about them; but, in addition to the "Hiad" and the "Odyssey," Homer is the reputed author of another poem, the "Batrachomyomachia." At any rate, whoever the author of it, that poem with a long name is a very old composition. In it domestic fowls are mentioned.

Next we take a long jump indeed-from Homer and Hesiod to Varro, who wrote about forty-five years before Christ. He gives us some very detailed and particular statements about the cocks and hens of his time; but they are statements so apparently at variance with what the preconceptions of a modern would lead him to, that, were the particulars not established by later observations, made in a very particular way, one might be excused for not believing the Roman historian. Fowls, both wild and tame, were known, according to Varro, in the Roman poultry market of his time. "Wild fowl," he says, "are rare at Rome, being seldom met with except in cages. They do not crow," he proceeds to remark, "nor do they resemble domestic fowls in appearance, but approach nearer to the African bird."* Many other particulars respecting these wild fowls does Varro narrate; but the reader will probably have begun to suspect that, by no possibility could a wild bird, having the characteristics of form as described by Varro, get modified by civilization into an ordinary cock or hen. Yet, curiously enough, the strange testimony of Varro has been confirmed in a very satisfactory manner; the evidence being as follows.

In the year 1842, Captain William Allen led one of those fatal explorations up the Niger, which cast a blight on the memory of that ill-fated region. The expedition proved mortal to about half those who took part in it; and the survivors were reduced to an almost unexampled condition of suffering and prostration. In order to recruit their strength, the survivors were ordered to the isles of Ascension and St. Helena; but, happening on their way to touch the little volcanic island of Annabono, in the Gulf of Guinea, they not only found a plentiful stock of good poultry, but became acquainted with a fact of great interest to the naturalist; confirming, as it does, the statements handed down by Varro. According to the testimony of the natives of the little volcanic island, at a period some twenty years before the advent of Captain Allen, a few cocks and hens, escaping from an English ship, took to the woods, and, finding circumstances congenial to their natures, multiplied exceedingly. twenty years is no long time, apparently, to work out changes in the organization of a race; but, strange to say, it was a period long enough to have degraded (if the term be permitted me) once civilized English barn-door fowls back to the level and the characteristics of the wild fowls described by Varro. Not only had the cocks ceased to crow, having adopted a cry of their own, but, in form as well as colour, the ordinary type of common barndoor fowls had become widely departed from. Fortunately, and to place the testimony beyond any reasonable doubt, Captain Allen and his surviving associates were accompanied by a naturalist.

In this way Varro and Captain Allen between them undoubtedly prove the strutting chanticleers and clucking hens, who go pecking away in modern farm-yards, to trace their pedigree back to the wild fowl common enough in the forests of Bengal. This, indeed, is just the pedigree naturalists had made out for them; but so apparently profound are the differences between the form and colour of the two, to say nothing about the fact of tame cocks crowing, and the inability of wild cocks to perform the vocal feat, that ordinary people might have been held excused for not implicitly believing the statements of the naturalists.

And here, writing about the vocal powers of civilized chanticleer, it strikes me as a curious circumstance that he should learn his song in captivity, and that he should forget that accomplishment when consigned to the woods again. Not less curious is it, as well as a matter of precisely similar import, that the barking of dogs is also a language of civilization. The wild dogs of Australia never bark; the half reclaimed dogs of Constantinople do not excel in that line; and, as for the progeny of tame dogs allowed to run wild, they soon lose their barking power altogether. A dog, however, I may here remark, seldom runs wild if he can help it. To the majority of animals which man reclaims, making them companions of his steps, and denizens of his fields and home, civilization is a lot chequered to them with good and evil. If the horse, wild running in Tartarian steppes, be innocent of bruised oats and bran mashes, physic when he is out of sorts, a stable-roof over his head, and currycombing o' mornings; so he escapes a large per contra of equine troubles lain athwart his shoulders. and upon his convenient back, by the perhaps too exacting biped. Then, woe to the civilized bird or beast, good to be cooked and eaten! Dogs, I think, have a particularly happy lot of it. To them the change from savage to civilized life brings with it few or no disagreeables—save, perhaps, when fate may have cast their lot amongst natives of that central flowery land where puppies are held in culinary repute.

Some of the most interesting changes which time and wildness have wrought out upon animal races are perceptible in the American continent. I need hardly remark that, before the Spaniards set their conquerors' feet upon American soil, horses, goats, pigs, dogs, sheep, and a few other animals, were strangers to that continent. Of these, I believe the dog alone has never totally escaped from man's fellowship and congenial domination. As regards that other companion of man, scarcely less intimate than the dog-the horse, of course, I mean-it is far otherwise. Hundreds of thousands of horses, totally wild, roam at this time over the pampas and llanos of both North and South America. The soil and climate of America are probably no less congenial to the horse than those extensive plains in Central Asia from which the equine race is supposed to have ramified. Probably the wild American horse has all the characteristics of the originally wild stock; therefore, any peculiarity of type recognisable in the one, we may expect to be recognisable in the other. Well, what facts does testimony supply in this matter? We will see. Don Felix Azara, I believe, was the first to notice the circumstance that, amongst these wild American horses, there is hardly a black, a grey, piebald, or sorrel-

^{*} Known to us moderns as the Guinea-fowl, or pintada.

coloured individual to be seen. They all present the uniform type of brown short hair and black manes and tails. So far as the testimony of the naturalist just mentioned goes, the presumption is indicated that brown, with black manes and tails, was the colour of original wild horses—the very colour stated by Pallas as belonging to wild horses

of the Tartarian steppes.

The American descendants of tame pigs run wild illustrate, in their own personal characteristics, the mutation of type which an animal species may experience. Not only have the wilding porkers lost their slow slouching gait, and become veritable wild beasts of the forest-that might have been expectedbut their colour is invariably black, and their ears, instead of being pendulous, as is the case of tame pigs, prick up and stand well forward. Whilst grunter was a denizen of the farm-yard, with no enemy to fear save the butcher (whom he never learned to fear), and having no care for his dinner, a state of blunt hearing was of no particular disadvantage to him. Far otherwise is it with a wild forest pig, having to shift for himself the best way he can, and to whom the ability to hear quickly, and to remain wide awake, is a matter of the utmost consequence. To such a pig, prick-up ears are a sort of necessity, and accordingly God has supplied

America presents sheep and bullocks for the naturalist's investigation, under the somewhat rare and very interesting condition of neither quite wild nor quite tame. In them the mutation of race in passing from civilized back to savage life is not wrought out, but is yet in a state of transition. Before more specially pointing out what has happened to both these races, I would just in passing direct the reader's attention to a series of animals of the sheep tribe, the skins of which are stuffed and preserved in the zoological department of the British Museum. Without particularizing the animals in question by the hard names which naturalists apply to them, it will be enough for my purpose if the reader observe that certain sheepy-looking animals are there to be seen-sheep-like in form, face, horns, and, in short, everything save the one characteristic of wool. Glancing now the mental eye far away from the stuffed skins of the British Museum, and contemplating all the solicitudes of which sheep are the objects, by reason of their fleece -considering how those warm coats of theirs have to be bathed, anointed, and otherwise cared for to prevent ill results-a question might arise of the following kind. How would a wild sheep manage with no kind shepherd at hand to see to the wool toilette? On this point the half wild sheep of America furnish an instructive lesson. Their lambs have wool like any civilized lambs, and the wool continues growing for a period: but mark now the curious result. If the shearer comes before a certain period, and shears the fleece, well and good: another fleece begins to grow, lengthening to maturity. If, however, the shearer so far neglects this operation that a certain time, a little too long, elapses, off falls the wool of its own accord, a crop of hair takes its place, and wool never grows on the hairy part again.

What can be more beautiful than this illustration of the way in which the Almighty modifies the characteristics of a race in favour of mankind? The young lamb with woolly fleece would seem to say mutely, and once for all, "Wild or tame? which is it to be? Take your choice, but choose at once."

Passing now from sheep to cows, just contemplate the enormous quantity of cows' milk consumed by human beings, and how freely cows supply it. But this facility of milk-yielding is a characteristic impressed on the species after many centuries of contact with humanity. The half-wild cows of America yield milk indeed, for their own progeny, but they have very little to spare besides. Neither the Spaniards at home, nor the descendants of Spaniards abroad, are much of a milk-loving people; but whenever a travelling milk-lover wanders amidst the half-wild cows of certain parts of America, he finds it no easy matter to get a little cows' milk. The animals have lost the function of continuous supply. To finish our account of tame animals run wild in America, I may remark that only the goat and the donkey have grown handsomer for the change which has come over their fortunes. As to the goat, his head has become smaller and his eye brighter; and, who would have thought it?-the wild donkey actually seeks out the wild horse to do battle with, fighting, I am bound to say, most treacherously-the very reverse of all that is noble and chivalresque-but, for the most part, successfully. In short, the wild donkey seems to be a fellow of more intelligence than the wild horse, but at the same time more treacherous, resentful, and unforgiving.

RIFLE SHOOTING IN EUROPE AND AMERICA.

The importance now attached to rifle shooting in this country, as one of the principal elements of its future defence, may render interesting some information concerning it, as practised both in the Old World and the New.

Switzerland is one of the earliest countries in Europe in which the rifle has been popularly used, and the mountain republic has acquired a reputation on this point, worthy of the land of Tell. The bold burghers who sustained that intrepid assertor of his country's liberties, have been succeeded by men who wield the rifle with the same ability with which their forefathers bent the bow; and in these days, when the redoubted shaft has been superseded by the more deadly shot, equal attention is devoted towards maintaining the national renown. All the youth of the Helvetic Republic are early trained to arms. Even at school they are subjected to strict military drill; and we cannot refrain from here adding that, in so far as our observation has extended—and it has been tolerably extensive—the continental system of military drill, which expands the chest and renders the figure erect and manly, would prove a truly valuable supplement to our insular sports-cricket, foot-ball, etc., which have a tendency to round the shoulders and mar the gait. Physically, we are the first people in Europe-per-