ers, all of different nationalities, as shown by costume and countenance.

The cimeter, with hilt of rhinoceros-horn, and curved blade, on which are inscribed verses from the Koran, has attracted the attention of the Turkish *cawass*, or mercenary soldier, who is apparently examining the temper of the blade, or the inscription thereupon. Armed to the teeth, with sword at side, and two pistols ostentatiously displayed in his sash, he is quite the ruffian he looks; equally ready for riot or crime, and as reckless of his own life as of that of others.

His companion, who is also eagerly examining the same cimeter, and whose costume so is dissimilar, is an Arnaout or Albanian soldier, whose semi-Greek costume and blood have not made him a whit less savage in nature or in habits than his Turkish *confrère*. In fact, he is apt to be the worse devil of the two, and his face indicates it unmistakably; though his gay, half-Greek costume, and long gun with crutchlike stock, make him the more picturesque vagabond of the two. The other two are evidently mere passers-by, attracted by curiosity and the love of seeing the progress of a trade; both strong passions with the native Egyptian. And these are to the "manor born" Egyptians, *pur sang*, which none of the others are. One is probably a neighboring trader, the other the servant of some rich bey or pacha.

In the background, on one side you, behold a group of low-class Egyptians playing checkers, and gambling for *paras* (the fractional part of our cent), with as much eagerness as though the stake were gold instead of copper. Watching them with eager interest, sits the *chiboukji* or pipe-bearer of the merchant, his master's Persian *narghilé* in his hand, in the light and airy costume so well adapted to this climate. In the dim distance you see the muffled figures of two women, carefully shrouded, and veiled from the gaze of man; but whose costume is not suggestive of the symmetry of the fair forms it may or may not so effectually conceal. The latticed window above, from which these caged birds look out upon the world of their narrow street, indicates that it is a harem they are entering, into which their sable guide and guardian, of neuter gender, has preceded them.

The face and attitude of the old merchant make a good study. He is watching with penetrating eye and immovable *sang froid* the intent faces of the prospective purchasers, whose whole armory of weapons cannot protect them against his superior craft and management. On his extended fingers he is indicating the price he will take for the coveted cimeter, three hundred piasters probably, as his three fingers only are open.

With our best wishes that the old gentleman may have the best of the bargain, let us make our salaam and stroll on.

CHARLES ROBERT DARWIN.

CHARLES ROBERT DARWIN, the eminent naturalist, is descended from two men of great note in their day and way, one of them distinguished for speculative, and the other for applied science. His paternal grandfather was Dr. Erasmus Darwin, the author of the once famous "Botanic Garden," and of a curious physiological essay entitled "Zoonomia;" while on the mother's side the grandfather of the subject of our memoir was Josiah Wedgwood, the inventor of "Queen's ware," whose taste and skill raised English pottery to the dignity of a fine art, and added incalculably to the wealth of his country.

Mr. Darwin was born at Shrewsbury, on February 12, 1809, his father being Dr. Robert Waring Darwin, a Fellow of the Royal Society. He was educated at the Shrewsbury school under Dr. Butler, afterward Bishop of Lichfield, and in the winter of 1825 went, for two years, to the University of Edinburgh. After this he proceeded to Christ's College, Cambridge, where he took his B. A. degree in 1831.

Mr. Darwin inherited from the author of "Zoonomia" that love of natural history and the allied sciences which has been the labor and the pleasure of his life. In the autumn of 1831 Captain FitzRoy, R. N., having offered to give up part of his own cabin to any naturalist who would accompany H. M. S. Beagle in her surveying voyage and circumnavigation, Mr. Darwin volunteered his services without salary. His scientific acquirements were already so well known that the offer was at once accepted, Mr. Darwin stipulating only that he should have the absolute disposal of all his collections.

The Beagle sailed from England December 27, 1831, and returned on the 27th October, 1836. During this absence of nearly five years, Bahia, Rio Janeiro, Montevideo, St. Julian and Santa Cruz, the Falkland Islands, Terra del Fuego, Valparaiso, Lima, the Pacific Islands, New Zealand, Australia, and the Mauritius, were visited and examined. In 1834, dur ng his absence, Mr. Darwin was elected a Fellow of the Royal Society.

In 1839 Mr. Darwin published a volume as part of Captain FitzRoy's general work, descriptive of this voyage. The interest excited by this, one of the most graphic, and at the same time most philosophic book of travels that was ever published, led to its reproduction in a modified form, in 1845, under the title of "Journal of Researches into the Natural History and Geology of the Countries visited during the Voyage of H. M. S. Beagle round the World." This Journal shows Mr. Darwin to have been a singularly close observer of every phenomenon in natural history, and of every variety of condition, physical and mental, of the people whom they visited during this remarkable voyage, and exhibits the possession of perceptive powers of the highest order. No single phenomenon is described by Mr. Darwin until after it has been most cautiously examined, and the reader of the Journal is soon impressed with the persuasion that the facts narrated are placed beyond a doubt, and that his reasonings on those facts are ever guided by a system of most severe inductive philosophy. This is most especially exemplified in Mr. Darwin's reasonings on the origin of the coral reefs of the Pacific.

In the beginning of 1839 Mr. Darwin married his cousin, Emma Wedgwood, and shortly after took up his residence at Down, near Farnborough, in Kent. For twenty-six years, in the retirement of his home, Mr. Darwin has devoted himself to the care of a large family, and the quiet and close investigation of the works of Nature. His first labors, after this date, were editing the "Zoology of the Voyage of the Beagle," giving an account of the habits and ranges of the various animals therein described. In aid of the publication of this and other works bearing on the same subject, the Lords of the Treasury granted £1,000. In 1842 Mr. Darwin published his work on "The Structure and Distribution of Coral Reefs;" in 1845 "Geological Observations on Volcanic Islands," and in 1846 "Geological Observations on South America."

Continuing, without rest, his researches, we find the results of his unwearying industry in two volumes published in 1851 and 1854, "On Pedunculated and Sessile Cirripedes," and, in two other volumes, on the fossil species of the same class.

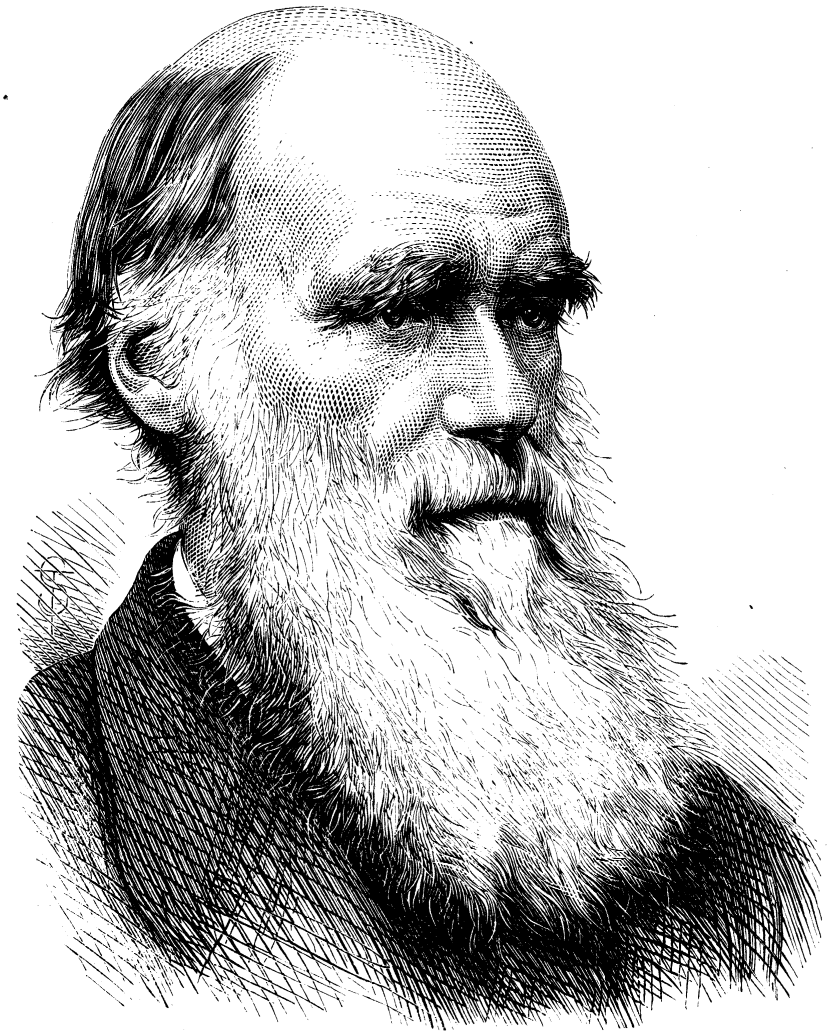
Toward the close of 1859 Mr. Darwin published his "Origin of Species by means of Natural Selection." Of this work four English editions have appeared, and nine foreign editions, in French, German, Dutch, Italian, and Russian. Its popularity will be shown by the fact that more than one hundred reviews, pamphlets, and separate books, have been published upon it, while the earnestness with which the question brought under notice by Mr. Darwin is still discussed, appears to show that these will be probably doubled in a short space of time. In a few words, our author has himself expressed the theory he teaches; these few we extract from the last edition of the "Origin of Species:" "As man can produce, and certainly has produced, a great result by his methodical and unconscious means of selection, what may not *natural selection* effect? Man can act only on external and visible characters. Nature (if I may be allowed thus to personify the natural preservation of varying and favored individuals during the struggle for existence) cares nothing for appearances, except in so far as they are useful to any being. She can act on every internal organ, on every shade of constitutional difference, on the whole machinery of life. Man selects only for his own good, Nature only for that of the being which she tends. Every selected character is fully exercised by her, and the being is placed under well-suited conditions of life."

In 1853 the Royal Society awarded to Mr. Darwin the royal medal, and, in 1859, the Wollaston medal was given to him by the Geological Society. In 1862 he published a book full of curious research, "On the Various Contrivances by which Orchids are Fertilized." Of separate papers, published by this naturalist, we find the following among the more important: "On the Connection of Certain Volcanic Phenomena in South America;" "On the Distribution of Erratic Bowlders in South America;" "On the Formation of Mould by the Earthworm;" and "On the Geology of the Falkland Islands"—all published in the Transactions of the Geological Society. In the Journal of the Linnean Society, three papers have appeared from the pen of Mr. Darwin, "On the Dimorphous and Trimorphous States of Primula," and one paper "On the Movements and Habits of Climbing

Plants." This last one has since been published as a separate work. In 1864 the Royal Society awarded to Mr. Darwin the Copley medal, and he has been elected a member of various foreign scientific bodies.

While no one questions Mr. Darwin's eminence as a naturalist, his "Origin-of-Species" theory has given rise to one of the hottest controversies of modern times. His views are adopted by some of the most eminent men of science, while by others and by theologians generally they are denounced as fantastic and atheistical. Of the truth or falsehood of his theory, we have no opinion to express. We merely propose to state, as plainly as possible, what the theory is.

Broadly expressed, Darwinism is the attempt tc account for the present and past diversities of life on our globe by means of *continuous* development without the intervention of *special* "creative fiats" at the origin of each distinct species. Every living being has the power of transmitting to its offspring its general characteristics. For instance, the children of black parents are black, not white, and *vice versa*. The offspring of the horse follows the species in general appearance, strength, intelligence, etc. The Scripture proverb, "Men do not gather grapes of thorns, nor figs of thistles" gives the substance of this property of life. This property is known as *heredity* or *atavism*. But, though *heredity* exists everywhere, it is a truism—so much so that it has not heretofore received the attention it deserved—that the offspring are not *identical* with the parents. However much children may resemble the father or mother, an acute observer will quickly detect some well-marked difference. This is called *variation*. Mr. Darwin holds that it is by the accumulation continued for the countless ages of past time of such slight variations as we now see, and their transmission by means of *heredity*, that all our present diversities of life originated. It will be asked, Why is there any accumulation, and how is it brought about?



CHARLES ROBERT DARWIN.

The enormous reproductive powers of even the most slow-breeding mammals, such as man and the elephant, could in a very short time stock the world. The well-known formula of Malthus expresses this fact as follows: beings increase in geometrical progression (2, 4, 8, 16, etc.), while the means of subsistence can only increase in arithmetical progression (1, 3, 5, 7, etc.). This must lead to an enormous destruction of living beings, and produces, what has been well termed, a "struggle for existence." In this struggle, as in every other, the organism best prepared comes off victorious. The very smallest variation from the parent-form may be of advantage—for in this *life*-battle parents are against children, and children against parents. The case of the queen-bee, which slaughters her fertile daughters, or is slaughtered by them, shows this conclusively. The accumulation, therefore, takes place because these variations are *useful* to the beings in their successive struggles for existence. No quality ever arises or is ever inherited for the exclusive benefit of any other being, whether it is related to the one in question or not. This accumulation of variations is strictly *utilitarian*.

It is well known that in the hands of breeders useful peculiarities in their animals are perpetuated by pairing those which show such peculiarity. Our present improved breeds of *long*-horned and *short*-horned cattle, race-horses, merino-sheep, "carrier," "tumbler," "pouter," and "fan-tail," pigeons, etcetera, demonstrate that these peculiarities may not only be perpetuated, but that they can be increased largely if not indefinitely. It is said there are one hundred and fifty varieties of pigeons alone, from a single parent—the rock-pigeon—and all, who have given the most cursory attention to the structural and visible differences between even the most allied breeds, must be struck with astonishment at what has been accomplished. This process is known as *selection*, and is used by man exclusively for his own benefit. Mr. Darwin extends this procedure to Nature, with an important change in its object. Man can only select visible characteristics; Nature, on the contrary, is continually scrutinizing the *whole* being, and as continually stamping with approval those variations which are useful to the organism. This principle works altogether by means of life and death—the latter being the penalty of a failure to meet successfully the circumstances in which a being is placed, be those circumstances physical or vital, enemies or forces—in a word, "the conditions of existence." An illustration, given by Professor Huxley will serve to fix this in the mind: "In the woods of Florida there are many pigs, and, very curiously, they are all black. Professor Wyman, many years ago, asked some of the people why they had no white pigs, and was informed there was a root in the woods (called paint-root), of which, if the *white* pigs eat, their hoofs cracked and they died, while it did not hurt the *black* pigs at all." This weeding-out on the one side, and preservation on the other, is what is meant by *natural selection*.

In brief, then, Mr. Darwin holds that all our present forms of life, different as they appear, can be explained by "descent with modifica-

tion"—such modification having always a utilitarian object—the favoring of the being in its "struggle for existence," and being governed by *natural selection.*

THE GARDENS OF THE SOUTH.

THE facilities afforded by the rich alluvial lands of the Lower Mississippi for all agricultural purposes are proverbial the world over. The towering cypress, the unrivalled live-oak, and the fragrant, gigantic magnolia, attest the wonderful producing-power of the rich soil. The climate is also mild, and thus all natural causes combine to encourage the industry of the planter and the florist. It has never been a necessity—and has therefore not become a custom—in the Southwest to enter upon those costly luxuries of more northern civilization known as expensively-cultivated gardens. The denizens of more favored lands of the South have ever possessed, in the spontaneous productions of Nature in floral wealth, treasures superior to the most abundantly-rewarded efforts of practical horticulturists living in the bleak regions of the North. For in the South it is common to find in abundance the year round, growing by the road-side and sheltered in the forests, plants and flowering shrubs which, if only imperfectly produced as exotics, would call forth the most enthusiastic admiration.

The charming cartoon we present of a Southern garden suggests how magnificent are the rewards of taste when turned in this direction under the favorable auspices of a favored climate and the possession of a virgin soil. In more northern latitudes, we may, by the expenditure of large sums of money, and under the forcing efforts of hot-houses, and the grotesque expedient of absolutely clothing our favorite plants half the year round, have a short-lived summer presenting us with many of the rich varieties of gorgeous flowers and rare shrubs peculiar to the South; but they ever remain, under the most favorable circumstances, stunted and imperfect, checked, withered, and discouraged, suffering from the baleful airs that come sweeping down from the Arctic zone.

It would be impossible, in our limited space, to designate in detail the wealth of a Southern garden, nor could we give a clear idea in words of the rapid growth which characterizes its development. So nearly are all the trees evergreen, that the russet of the fall varies but little from the crisp and dried look of the intensest summer heats. All the year round there is a succession of flowers. In the winter months, the most charming of all buds—that of the orange—is in perfection; their fascinating brilliancy of white, which speaks so eloquently of purity, contrasts on the same stem with the golden, ripened fruit. As the winter months wear away, the ground becomes alive with the spontaneous growth of the crocus, jonquil, and hyacinth; and the first breath of spring unfolds the innumerable varieties of the fragrant jessamine.

The banana, the enormous leaves and stalk of which sank withered and blasted, as if by fire, at even the suspicion of a frosty breath, now awakens to an absolute resurrection; for it thrusts up its delicate green stalk from the living root with a rapidity of movement visible to the eye, and, unfolding its broad leaves, waves them like banners on the balmy breeze.

The hedges, interlaced and massed with innumerable shrubs, protrude their buds, and then shut out the sun by their wealth of vernal green. The innumerable creeping plants, which in their profusion seem determined to possess every unoccupied nook of garden, house, or wall, are pendent with gems; and grand in this graceful family of wreathing beauties is the "running rose-bush," that mounts high above all its ambitious rivals, and furnishes its floral beauties in "bouquets," instead of isolated buds and flowers.

The wonderful magnolia, which has gone through the winter defiantly displaying its metallic-green and varnished foliage, now gives signs of donning a new dress. It wears for a few days a rusty appearance, by turning toward the sun the gray, velvety lining of its large crisp leaves, and then shoots out its buds. It is a strange sight to see that monarch of the forest enrobing itself in its spring garb, and becoming a gigantic cone of buds, as pure and white and delicate in texture as those of the fragrant lemon, and yet each individual specimen more than a span in diameter.

In the Southern garden, which, when carefully attended and tastefully planned, is almost without exception the result of woman's taste and inspiration, are to be found many contributions familiar and natural to the Atlantic coast. The raspberry, so familiar to our Northern readers, in the Southern garden is essentially an exotic, and, because of the difficulty of acclimating it, and the gracefulness of its fruit, it is a favorite. It has to be carefully protected from the intense heat of the sun, and the rich soil has to be neutralized by foreign substances; even under modifying circumstances, the reward beyond possessing a vigorous shrub is uncertain. The cherry-tree, which has its admirers in the South, also changes its nature. Under the superior advantages of soil and climate, the cherry-tree assumes the habits of the genuine aristocrat. It spurns the labor of yielding any return for its culture, except the shade that comes from its now exaggerated branches. The fruit ceases to be borne, and the humble, useful cherry-tree of the New-England cottage, emblazons itself into a showy, gay, but nevertheless sprightly evergreen tree. But some of our Northern favorites act in better spirit, and show their sense of obligation by enlarging their natural advantages without losing their individuality or materially changing their habits. This good character is especially due to the heaven-blessed family of roses. They flourish in all their primeval charms everywhere, the solace of the humble, the most precious adornment of the proud. In the Southern garden, by a little judicious pruning and confining the root to one parent stock, the rose becomes a miniature tree, yet loses none of its choicest qualities for fragrance and delicacy. The moss-rose really assumes, when first seen by a stranger, an almost unnatural extent. Its buds often grow to the size of a pigeon's-egg, covered with enfolding leaves and integuments which seem to be involved in a humming-bird's nest of cinnamon and emerald-tinted moss.

To the Southern garden exclusively is attached that Puck of the woodland wilds, the inimitable mocking-bird. He is brave, sociable, and useful. He is a game-looking bird, of quiet-gray colors, with nothing about his plumage to separate him from the rough coverings of bark, and the pendent moss, that hangs in such weird grandeur from the limbs of decaying trees.

Over the summer-house of the Southern garden, though occupied by visitors, the mocking-bird will perch, and curiously peer down on his human companions, as if he would divine their thoughts. He will sympathize with the sounds of human voices, enjoys the conversation, and the laughter and wrangling of children. Under such circumstances, he will dash from limb to limb as if crazed with excitement, occasionally giving vent to his spirit in carols that are full of genius and heavenly melody; or, perhaps, inspired with some heroic idea, he will crowd into rapid measure the impotent resentment of the chicken-hawk and the screams of the bald eagle. And when evening sets in, and the moon rises over the charms of a Southern garden; when the night is warm, and the lattice is up, and the door is open to catch a passing breath of air; when the flowers have gone to sleep, leaving their fragrance to literally load the air; when Nature is half exhausted under this semi-tropical climate of the South, the mocking-bird, perched upon some dead limb, that prominently protrudes beyond the rich purple foliage, will pour out his song of praise, his wonderful overture of sweet notes, inspiring all living things within the sounds of his miraculous organ with a dreamy sense of pleasure and admiration, which seems to be consonant with the floral wealth of the Southern garden.

We are justly proud, in the North, of our conservatories and our public parks. The time must come, however, when our Southern cities will possess these health-inspiring places of recreation, associated and adorned with local peculiarities growing out of natural advantages that will make them unprecedentedly attractive. The severity of the climate of the North limits variety; the extreme heat of the tropics destroys umbrageous foliage, and makes the floral world sensational. It is in the happy medium offered by the climate of the Southern States that we must eventually look for and find Nature under high artificial cultivation, presenting attractions that will have no rivals in any other part of the world.

TABLE-TALK.

THERE are certain complaints publishers of periodicals are apt to receive from subscribers, which are so unreasonable, that we must crave the indulgence of the reader in a little space to reply to them. These complaints are levelled against the appearance of advertise-