treme, which being wholly unnecessary, and, at the same time, imposing serious restrictions upon commerce, admits of no justification.

The remedy which Mr. Mauzells has in his mind for altering this state of things, is not very clearly developed; but his idea may be perhaps briefly and comprehensively expressed, as the proposed establishment of a governmental department—a ministry of health—a professional centre, with which all local boards might correspond, and from which they might derive impetus and unity. We certainly cannot believe that such an institution, if it exerted individually and without such a machine; and it seems to us, more than probable that something of this sort must shortly be attempted, with the out of use of simple institutions, and something beyond them is becoming hourly more indispensable. The usual practice, in cases of sudden emergency, is to apply to the College of Physicians, as the great medical council of the nation; and the result has, with few exceptions, been disappointment. This we hold to be no just matter of reproach to that body. Public opinion marks with reprobation every medical candidate for its confidence, who makes himself conspicuous for any acquisition or pursuit, which can be imagined, in the slightest degree, to distract his attention from the sick bed: and if it were not too much to expect, from the members of the College, industry and zeal, where there is neither honour nor profit, the very first consequence of any one of the body taking a prominent part in any such delegated duty, would be a sensible decrease of the degree of medical practice. There are, however, other causes, too, which render the metropolitan practitioner not always the best authority in questions of what Mr. Mauzells calls "medical practice." A ministerial department, with honourable position, and salary sufficient to withdraw able and educated men from the drudgery of practice, might afford a better means of coping with the multitude of medical difficulties which at present engage legislative attention, and give rise to empirical remedies, conceived in ignorance, and fraught with the most fatal consequences. We are far, however, from thinking that even such a measure would suffice to ensure a maximum of sanitary improvement. The highest officers in the state are efficient, only as they are natural and reasonable men; and where there is no diffused knowledge, there is no sound opinion. No matter what the question,—from a quarantine law, to a lunacy case,—from the purity of Thames water, to an ordinary trial for nuisance,—the most miserable helplessness and childish simplicity are manifested, both in functionaries, and in the public that judges of them: and as long as this state of things continues,—as long as general society is at the mercy of its servants,—so long will its interests be betrayed by those who are without a master to sustain and to control them.

Narrative of the Surveying Voyages of H.M.S. Adventure and Beagle, between the Years 1826 and 1836, &c.

[Second Notice.]

The defect of these volumes (and what work has not its defect?) is, that consisting not of a single narrative, but of several journals of persons who have visited different countries together or in succession, they exhibit a variety of a want of unity and continuous interest, and contain frequent repetitions, not merely as regards the movements and operations of the expedition; but as the surveyors, in their journals, often encroach on the domain of the naturalist, so he again is obliged to connect together the results of his investigations by a separate web of personal narrative. We must not, however, be supposed to intimate that Mr. Darwin's journal ought to have been connected with, or absorbed into, the body of the preceding narrative: we only mean to express our regret that by appending it to a work composite in its nature, and diffuse in execution, he should have been obliged to abandon his account of his own observations as far as his knowledge of natural history, to omit many details, the exposition of which would, in his hands certainly, have been both amusing and instructive.

It is true that he intends to disclose his facts under a different critical view, completely, in a series of works, one of which is now in course of publication; but, in the mean time, the journal which is the subject of our comments labours under this disadvantage, that, stripped of the mantle of admittance, in the spirit of bold generalization, of which the world, not without justice, is exceedingly mistrustful. Mankind like to feel convinced that the utterer of theories has spared no pains in assaying the metal to which he seeks to give general currency. They require him to be a minute and patient observer, not biased in his observations by any previous theory; and disposed to reject the consideration of dry facts, and to rear his godly edifice to its full height at once on assumed premises. If he would aspire the world with confidence, he must allow himself to descend to the foundations of the crown of the pedant. To us, Mr. Darwin's remarks seem to display no common sagacity and power of observation, but, denuded as his journal is in general of elemental facts, his reasoning is the more fallible. The more the subject matter contained therein will meet with a less general concurrence than they are really entitled to.

Having thus candidly expressed our opinion that Mr. Darwin's journal, forming the third volume of the Narrative of the Voyages of the Adventure and Beagle, has the rare fault of seeming, though a good-sized volume, and following two others of still more portly dimensions, to be much too short; we shall now proceed to unfold the nature of its contents. By "contents" we mean the general trend of it—its purpose, its design—the best evidence of his character, and the readiness with which he converses with nature in every variety of situation.

St. Jago, one of the Cape Verd islands, viewed from the sea, appears a desolate, burnt and abandoned tract of land—traversed by broken rays of a tropical sun to perpetual sterility; but in the centre of the island the village of St. Domingo presents a smiling scene of unexpected beauty. The village is situated at the bottom of a valley bounded by lofty and jagged walls of sombre rock: the summits of these mountains are fringed with cheese vegetation marks the course of a lively little stream, and affords a striking contrast with the black rocks behind. In this secluded spot, when visited by our author, the population, as singular as the scene, were celebrating a grand feast day. In language and manners, the inhabitants of the island are Spaniards, but they are most of them jet black, and, we presume, of Yelof descent.

"On our return," says Mr. Darwin, "we overtook a party about two weeks on the island. The chief is the most excellent taste; their black skins and snow-white linen being set off by their coloured tunics and large shawls. As soon as we approached near, we were received round, and covering the path with their shawls, sung with great energy a wild song, beating time with their hands upon their legs. We threw them some vintages, which were received with expressions of laughter, and we left them reddening the noise of their song."

The atmosphere at St. Jago is generally very hazy, an appearance due, according to our author, to an impalpable dust which is constantly falling, even on vessels out at sea. The dust is of a brown colour, and under a bright sun quickly fuses into a black enamel. We cannot assent to the opinion that it is carried from the coast of Africa. It is more natural to suppose that the ascending hot current of air from the island carries the dust over the Cordilleras, and deposits it on the worn volcanic rocks, and that, when scattered abroad in the atmosphere, it is again carried back to the island by the cool currents from the sea. A similar phenomenon is observable in certain parts of Chili, where the annual fall of ashes falls in considerable quantities, is light-coloured, as if it were the produce of volcanic ashes.

"The geology of this island," says Mr. Darwin, "is the most interesting part of its natural history. On entering the harbour, the face of a mountain, in the face of the sea cliff, may be seen running for some miles along the coast, and at the height of about forty-five feet above the water. Upon this face of the mountain, a line of corrugated matter with numerous shells embedded, such as now exist on the neighbouring coast. It rests on
ancient volcanic rocks, and has been covered by a stream of basalt, which must have entered the sea when the white shelly bed was lying at the bottom. It is interesting to trace the changes, produced by the boat or the wave, in the frizzle surface of a thickness of several inches it is converted into a firm stone as hard as the best freestone; and the earthy matter, originally mingled with the calcareous, has been converted into clays, thus making limestone white and pure. In other parts, a highly crystalline marble has been formed. The beds of lava rest in successive gently sloping plains, towards the interior and the débris of the striped outline preceded.

St. Paul's rocks, a cluster not quite three quarters of a mile in circumference, rising abruptly from the water, are elastic, and visible from the circumstance that they show no signs of volcanic origin. The sea-weed which covers their sides gives food and shelter to great quantities of fish: these, when caught with the line, could not be saved by the skimmer from the sharks without a constant struggle. These rocks are thickly inhabited by sea birds. Near many of the nests of the Noddy (a species of tern), was seen a placed small flying-fish, brought probably by the male bird for its partner. As often as the birds have been disturbed, they fly round the large island, which is the first colonists of the coral islands in the South Sea is not probably quite correct; I fear it destroys the poetry of the story to find, that these little fish whose eggs should thus take possession, before the coconut tree and other noble plants have appeared.

The greater number of these insects are the parasitic followers of the wild fowl, and may therefore be supposed to have been conveyed by the latter to the isolated rocks of the ocean. The origin of the penguins is not apparent more difficult to explain. But, besides the chances of their being drifted thither, or of also being conveyed by the birds, it is certain that there are species of spiders endued with the power of making long aerial networks.

"One day," says my author, "the weather having being line and clear, the air was full of patches of the floating gossamer web, as on an autumnal day in England, and the spider's appearance more wonderful. The land, in the direction of a steadily though light breeze. Vast numbers of a small spider, about one tenth of an inch in length, and of a dusky red colour, were seen fastening their webs among the branches of the trees, and on the surface of the water. When disturbed it lifted up its forelegs in the attitude of attention. On its first arrival, a young woman, who was ill in bed, sent to instruct her to visit it, and show her the compass. He was offered a dollar for a single your pocket compass caused unbounded astonishment. At one place, a lady who was ill in bed, sent to visit her, and ask her the compass. He was offered a dollar for a single Proctor, and the foreleg strength of the morning was thought to be a very unreliable practice; and, with many other oddities of a like kind, caused much surprise. If their surprise," says Mr. Darwin, "was great, mine was still greater, to find so much ignorance among people educated in science, and I was very astonished at the vastness of great extent." In the course of one of his excursions, he visited the estancia of Don Juan Fuentes, a rich proprietor, with whom he had no acquaintance; but, in these wilds, the great blue, and the blue-black, which are found under the roofs of every town, in all the provinces, and in many of the small villages, in consequence of the heat of the sun, and the want of shade, the windows of the houses are intended to cool the air by the constant circulation of the air.

"The, if the thread is wafted by the air, the spider were to run along it, the velocity of the insect would undoubtedly surprise the eye, so long as its proper motion were undetected. It might also communicate a momentum to the floating thread by this manœuvre, which is, therefore, good reason to suspect, is actually put in practice. The number of spiders, compared together, is much larger than in Brazil than in England. The Saltigrade, or jumping spiders, are particularly numerous, and of a great variety of species. Among the artifices resorted to by some of the spider kind for their protection, the following, observed by my author to be peculiar to the islands under discussion, is very striking: When disturbed, standing in the middle, it violently jerks the web, which is attached to elastic twigs, till at last the whole acquires such a rapid vibratory movement, that even the outline of the spider's body becomes invisible to the eye.

Of the country round Bahia our author says: "Delight is a weak word to express the feelings of a naturalist, who, for the first time, has been wandering by himself in a Brazilian forest. Among the multitude of striking objects, the general luxuriance of the vegetation bears away the victory. The ele- ence of the graces, the novelty of the parasitical plants, the beauty of the flowers, the glossy green of the leaves, the profusion of the species, and the almost insupportable mixture of produce and silence pervades the shy body parts of the wood. The noise from the insects is so loud, that it may be heard even in a vessel anchored hundreds of yards from the shore; yet within the recesses of the forest a universal silence appears to reign."

Luxuriant and enchanting as are the forests of Brazil, they have been so frequently and so well described, that I need mention them no more. It is probable that the views over in silence, and hasten to regions less fre- quently explored by the naturalist. Neither shall we devote much space to the natural his- tory of the Banda Oriental, or the Buenos Ayres department. From Mr. Darwin's descriptions, that the strangest animals inhabiting those countries are its human po- sse- sors. He thus sketches their general outline: "At night we stopped at a pulperia, or drinking- shop. During the evening a great number of Gauchos came in to drink spirits and smoke cigarettes: their appearance is very striking; they are generally tall and handsome, but with a proud and absolute expression of countenance. They frequently wear their hair in pigtails, and long black hair curling down their backs. With their brightly-coloured garments, great spurs dangling about their necks, and knives stuck as in a sheath looking as if out of a different race of men from what might be ex- pected from their name of Gaucho, or simple coun- trymen. Their politeness is excessive; they never ask for refreshment, but merely to taste it, but, whilst making their exceedingly graceful bow, they seem quite as ready, if occasion offered, to cut our throat."

Among the uneducated inhabitants of the Bande Oriental, Mr. Darwin's pocket compass caused unbounded astonishment. At one place, a young woman, who was ill in bed, sent to visit her, to show her the compass. He was offered a dollar for a single Proctor, and the foreleg strength of the morning was thought to be a very unreliable practice; and, with many other oddities of a like kind, caused much surprise. If their surprise," says Mr. Darwin, "was great, mine was still greater, to find so much ignorance among people educated in science, and I was very astonished at the vastness of great extent." In the course of one of his excursions, he visited the estancia of Don Juan Fuentes, a rich proprietor, with whom he had no acquaintance; but, in these wilds, the great blue, and the blue-black, which are found under the roofs of every town, in all the provinces, and in many of the small villages, in consequence of the heat of the sun, and the want of shade, the windows of the houses are intended to cool the air by the constant circulation of the air.

"We were here told a fact, which I would not have credited, if I had not had partly scurf proof of it, namely, that, during the previous night, hail as large as small apples, and exceedingly hard, had fallen with such violence as to kill the greater number of the wild animals. One of the men had already found thirteen deer lying dead, and I saw their fresh tracks in the morning. The river was filled with ice. The table-land had been covered with snow, which had not yet been cleared away, and a fresh snowfall had been received. I was astonished at the sight of a few men, who had for dinner; and they said that several were running about evidently blind in one eye. Numbers of smaller birds, as Ducks, hawks, and par- ticularly a black, which could fly only by a black mark on the back, as if it had been struck with a paining-stone."

Mr. Darwin's observations relative to the structure of the pampas, the plains of Patagonia and Chile, all lead him to the conclusion that the South American continent has risen from the depths of ocean within a very recent geological period. This is an opinion which he enforces with his usual ability, and more than usual force. It is impossible to state in detail the facts connected together by this hypothesis. We shall content ourselves with observing, that if the shingly plains of Patagonia, each several band of which, in succession, is supposed to have been at one time under water, and subjected to the violence of the ocean at the rate of a foot annually, (and Mr. Darwin depresses strongly the supposition of any but very gradual changes,) then at least one million of years must have elapsed since the period when the portion of the Argentinian pampas, which are the sand hills of the Cordillera and the Andes!

Tierra del Fuego is poor in animal productions, and its vast forests exhibit but few typical species. The outward luxuriance of those gloomy woods hardly conceals the enormous
mass of decay within. The waters of the Magel-
lanic regions contain a greater variety of produc-
tions of these, the kelp, or Fasciculata of Suelle,
which grows upon the rocks, and is particularly
It grows on every rock from high-water mark
mass of decay within. The waters of the Magel-
lanic regions contain a greater variety of produc-
tions of these, the kelp, or Fasciculata of Suelle,
which grows upon the rocks, and is particularly
It grows on every rock from high-water mark

To a zealous geologist, the Cordillera of the
Andes, with its grand array of volcanoes, many
of which are covered with snow, the eternal ice,
and of which the Andes themselves are but
merely its rim, and not the whole, is another
reason to question the accuracy of Captain
Cook's statement, that this plant sometimes at-
tains the length of at least 60 fathoms, or 300
feet. It is astounding to see how it flourishes in
the most inhospitable regions. It is seen even in
western coast, constantly trembling from the
blows, which raise it from the sea, is hallowed
ground. Nothing could deter Mr. Darwin from
crossing the high chain by the Usulpa Pass to
Mendoza, though the season was rather late,
and a fall of snow had already overtaken the
traveller caught between the two great ridges.
The road by the Usulpa Pass winds round the
southern side of the great peak of Aconcagua,
which has been ascertained, by the careful mea-
surements of the French the top is 22,864 feet
above the level of the sea, and is thus the
highest of the Andes. We cannot stop to descant on the
wonderful of the scene within the mountains, and the
steep-
ness of the roads; these, with the patience of
the mules, and other particulars of that class,
have been already fully described.
When our traveller found that the lower chain of
hills running parallel to the great Cordillera, was
composed of submarine lavas and sedimentary
deposits, he proceeded to the island of Chili, where
on the shores of the Pacific, he began to look
around for alluvial wood, which is characteristic of
those formations; and he was soon gratified in
an extraordinary manner. He saw on a bare
slope, at an elevation of probably 7,000 feet,
some snow-white projecting columns, which on
examination proved to be petrified trees, eleven
being allished, and from thirty to forty con-
verted into coarsely-crystallized white calcareous
masses. They were described by the learned
Robert Brownne to have belonged to the Ara-
canian tribe, but with some points of affinity
with the yew. It is worth while to observe the
feeliness with which Mr. Darwin develops the
consequences of his discovery.
"It required," he says, "little geological practic
to interpret the marvellous story, which this scene
at once unfolded: though I confess I was at first so
much astonished that I could scarcely believe the
plainest fact. A cluster of five trees, which grows
in the immediate vicinity of a small pond, and
and this again by enormous streams of submarine
lavas—one such mass alone attaining the thickness
of a thousand feet; and these deluges of melted
eastern and western deposit had been spread over
many wide valleys; and the trees, now changed into
cinders, were exposed projecting from the volcanic
soil, now changed into rock, whence, formerly, in a green
and pastureable state, the lofty chains of Chili.
Now, all is utterly irreclaimable and desert; even
the lichen cannot adhere to the stony casts of former
trees. Vast, and scarcely comprehensible as such
forms are to us, the valley of Chili, all one mass,
within a period recent, when compared with the
history of the Cordillera; and that Cordillen itself is
modern as compared with some other of the fossilifer-
ous formations of the world."

The Galapagos archipelago, situated under the
equator, at a distance of between five and six
hundred miles westward from the coast of Ame-
rica, are altogether volcanic, and contain, on
about ten little islands, at least 2,000 craters.
Its natural history is extremely rich, and the
number being enormous, both in itself, and in the
greater number of its inhabitants, both vegetable
and animal, being found nowhere else. The
birds were found to be quite ignorant of man,
and so tame, that they did not even understand
the language of the islands, and allowed themselves
to be approached so as to be struck with a stick.
An aquatic lizard, about three or four feet long, and of a most
hideous appearance, is the most singular pre-
dator struggling for mastery. Although the former
seems to have got the upper hand, the denials
of the latter element have not yet resigned their
claim. In every part, hermit crabs, of more
than one species, are met with, carrying on their
shells the productions of the sea, and the sea
feast of the neighbouring beach. As the vegetable
productions on the islands have been all drifted
thither by the waves of the sea, they are extremly
miscellaneous; so that the Flora has quite the
character of a refuge for the destitute; of twenty
species of plants, nineteen belong to different
genera, and these again to no less than sixteen
orders. The coco-nut is, as might have been
expected, the chief, though not the only tree.
On the Keeling Islands is a crab of monstrous
size, which perforates the upper end of the nut by
the hammering of its heavy claw; then with its
narrow pincers it extracts the white albuminous
substance. These crabs are good to eat, and in the
sea there is to my mind a considerable degree of
gradation in the view of the outer shores of these lagoon
islands. There is a simplicity in the barrier-like reef, the
margin of green bushes and tall coconuts, the
tropical rock, studded with fringy fronds, the
fragments, and the line of furious breakers, all running
away towards either hand. The ocean, throwing its
waters over the broad reefs, appears as an invisible,
invisible parade of enemies, as a blank mountain
conquered by means which at first seem most
weat and inefficient. It is not that the ocean
spawns the rock of coral; the great fragments scattered
over the reef, and accumulated on the beach, where
the tall coco-nuts spring, plainly bespeak the unmitigated
power of its waves. Nor are there any periods of
repose granted. The long swell, caused by the gentle but steady action of the trade-wind, always flowing in one direction over a wide area, causes heaves of the deck, violent enough to carry the delicate and tender, to their ultimate yield, and be dissolved by such irresistible forces. Yet these low, insignificant, coral islets, and are victorious; for here neither power, as antediluvian, by gradual, unresisting force, can be so impossible to give an analysis within reasonable limits; but we may direct attention to the principle on which the theory of the universe is based, and the moral canons on which the practical part of the work is conducted.

Asa'd declares that the end and purpose of man's existence is to act as God's vice-regent on earth. This purpose is to be realized by the combination of knowledge and practice; and it is the object of his age and nation — we should have no method of acquiring them. This moral rule or canon is substantially the same as the Aristotelian doctrine of extremities; property is determined by striking a balance between the claims of others and the character of his own nature. In this, the canon admits a virtual proximity of right to wrong, and falls short of the highest forms of evangelical virtue; but at the same time it is more practical than the modern rule of general conduct.

Mr. Thompson has prefixed to the translation an examination of the origin and nature of Oriental philosophy, and in a series of notes has compared the ethical system developed in the Akhlîk-i-Jâlyî with those of the great schools of philosophy in Greece and Italy.

Practical Philosophy of the Mohammadan People; being a Translation of the Akhlîk-i-Jâlyî, with References and Notes by W. F. Thompson, Esq. Published by the Oriental Translation Committee.

There has been no work published since Sale's translation of the Koran, which so clearly elucidates the mental and philosophical character of Mohammadanism, as the volume now before us. The day has gone past when the vague cry of mysticism and licentiousness served as an excuse for ignorance of the laws and habits of action belonging to the sect. The Mohammadan mind is no longer dominated by the Atlantic to the Pacific, and whose institutions would in the Middle Ages have gained by a comparison with our own. Now, when the Ottoman empire trembles on its base, when Persia is sunk in deceptiveness, when the inheritor of Baber's throne, the once mighty Great Mogul, is a pensioner on a company of merchants, and the lineal descendant of Timûr Lenk a beggar in the streets of Bokhara, it is easy to conduce in the enlightened and educated classes within itself the elements of weakness and decay; but we must remember that there was a time when it seemed far from improbable that the crescent would surmount the cross at St. Peter's and the voice of the muzuq be heard from the towers of Notre Dame. The ethical system voluntarily adopted by successive dynasties, and retrieved by conquering races without compulsion, is something more than a matter of speculation; it is necessary proof of that enlightened spirit of humanity which tends to raise history to the dignity of a science.

The Akhlîk-i-Jâlyî is universally recognized as the best digest of the moral principles which form the basis of the social system in the East. It is the work of Asa'd, the favourite minister of Hasan Beg,ultan of Musopotamia. It contains an able analysis of the motives and opinions by which a third part of the human race has for ages been actuated; we find in it the philosophy which the Greeks borrowed from the East carried back with their developments; we also discover the elements of the sciences preserved in the Byzantine and scholastic philosophy which held dominion over Europe in the Middle Ages. It is divided into three books, which treat of the individual, the domestic, and the political state of mankind. Of a work at this price it might be impossible to give an analysis within reasonable limits; but we may direct attention to the principle on which the theory of the universe is based, and the moral canons on which the practical part of the work is conducted.

Asa'd declares that the end and purpose of man's existence is to act as God's vice-regent on earth. This purpose is to be realized by the combination of knowledge and practice; and it is the object of his age and nation — we should have no method of acquiring them. This moral rule or canon is substantially the same as the Aristotelian doctrine of extremities; property is determined by striking a balance between the claims of others and the character of his own nature. In this, the canon admits a virtual proximity of right to wrong, and falls short of the highest forms of evangelical virtue; but at the same time it is more practical than the modern rule of general conduct.

Mr. Thompson has prefixed to the translation an examination of the origin and nature of Oriental philosophy, and in a series of notes has compared the ethical system developed in the Akhlîk-i-Jâlyî with those of the great schools of philosophy in Greece and Italy.


Lecture on War. Same author, and publishers. As we hereforeto (No. 512, &c.) fully expressed our opinion of the literary claims of Dr. Channing, the former part of this notice need not be repeated. We have left these small, though useful tracts, to have found their own way, had it not been for a somewhat contemptuous off-hand review on Channing's style which appeared in the last number of the Edinburgh Review. It needs no ghost to tell us who is the writer, though how Dr. Channing can have provoked his ill humour, we are at a loss to conjecture; unless, indeed, his obsequiousness of his superiors in life. For our own part, with all the faults imputed to the Doctor, we should heartily rejoice, if many of the works we are called on to examine possess of his pen as the writing of his mind, and the perception of his style. We perfectly agree with the critic, that simplicity and perspicuity are great merits; but they are not all that is requisite. These qualities are not wanting in many writers who possess no other. In these railroad times of authorship, they are, indeed, most easy of acquirement; and this very facility becomes a matter of reproach. We fully admit, that Dr. Channing is far more eloquent and ostentatiously ornate than, in the simplicity of our taste, we altogether admire; but we believe this to arise less from a struggle after elegance, than, misledding into affectation, than from his position as a pulpit orator. It is a very prevalent opinion, that church eloquence ought to be more pompous, sonorous, and metaphorical than an ordinary discourse, or a parliamentary speech. Pecuchres, too, are prone to listen complacently to their own echo — to wait, as it were, for the echo — and are thus apt to fall into imitations of Channing's style. To obviate this, we altogether kept clear of these influences, he has certainly not been misled by them in a degree which, cumbred for special and severe repugnance. If, how- ever, there is, there is indeed in Channing's Doctor, fewer yet still, we think, will agree with the reviewer in his low estimate of Milton's prose.

The first of these little tracts — "Self-Culture" — is of general and permanent interest; but as at least half-a-dozen reprintts have been already hurried out in this country, it requires no recommendation from us.