A

DISCOURSE

ON THE

TIMES, CHARACTER AND WRITINGS

OF

HIPPOCRATES.

READ BEFORE THE TRUSTEES, FACULTY AND MEDICAL CLASS OF THE COLLEGE OF PHYSICIANS
AND SURGEONS, AT THE OPENING OF THE TERM OF 1852-3.

BY ELISHA BARTLETT, M.L.,

Professor of Materia Medica and Medical Jurisprudence.

PUBLISHED BY THE QLASS.

NEW-YORK:

H. BAILLIERE, No. 290 BROADWAY

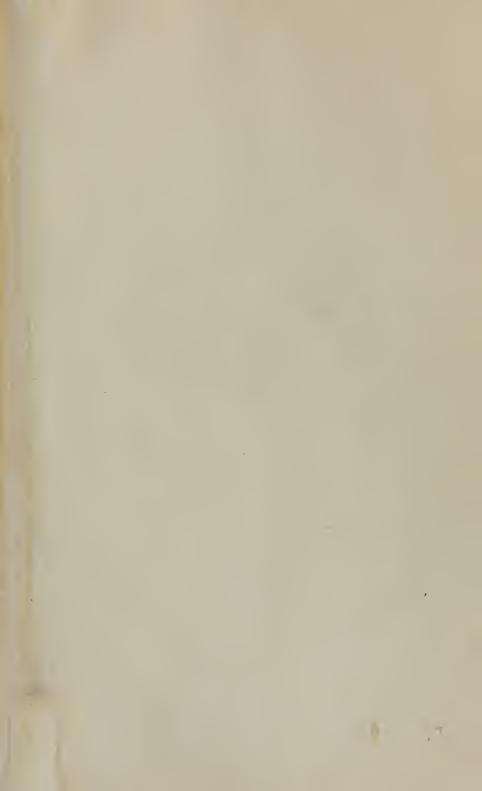
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TIMES, CHARACTER, AND WRITINGS

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ALEXANDER H. STEVENS, M.D., L.L.D.,

President of the College of Physicians and Surgeons.

MY DEAR SIR:-

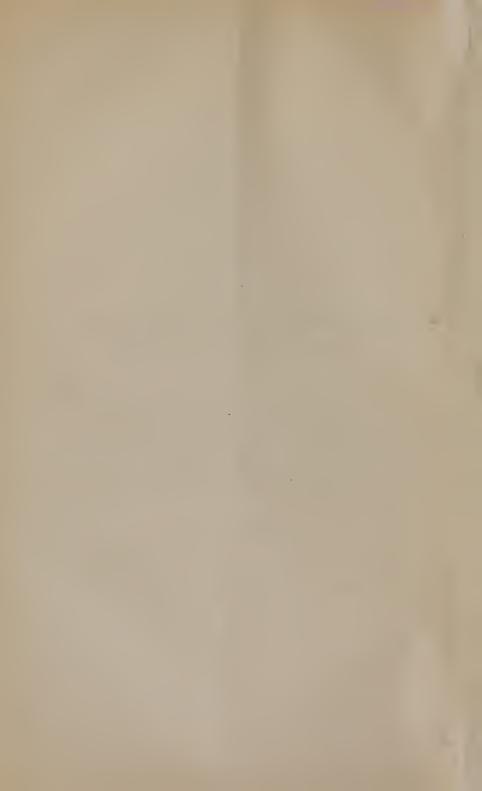
I do not know any one to whom a Discourse on the Times, Character and Writings of Hippocrates could be more worthily or more appropriately dedicated than yourself. I am proud that I can claim the privilege of this gratification; and I am happy that I have this opportunity of expressing my high regard for your character and attainments, and my grateful sense of the personal kindnesses that I have received at your hands.

I have the honor to be,

Very sincerely, Your Friend,

ELISHA BARTLETT

College of Physicians and Surgeons, Oct. 16, 1852.



Prof. Bartlett :-

Dear Sir,—At a meeting of the Medical Class of the College of Physicians and Surgeons, held at the College, October 12th, the undersigned were appointed a Committee to request of you for publication your Introductory Essay upon the Times, Character, and Works of Hippocrates, delivered before the Faculty and Students at the opening of the present collegiate term.

We need hardly presume to think that you will refuse our request, when we con sider how imperfectly the limits of an evening lecture enabled you to give expression to your most elaborate and elegant production.

Trusting, therefore, that you will cheerfully comply with the wish universally expressed to read your essay entire, and assuring you of our highest respect and esteem,

We remain, Dear Sir,

Your Obedient Servants,

HENRY L SHELDON, Secretary.

WM. H. DRAPER, Chairman.

Joseph H. Vedder, E. S. Hoffman, Chas, Cooper, D. C. Henriques, Henry B. Sands,

GENTLEMEN:-

I do not know that there is any good reason why I should not comply with the wishes of the Class, which you have in so kind a manner conveyed to me.

The studies necessary for the preparation of the Essay, and the preparation itself, were to me sources of a great deal of instruction and of pleasure; and if its publication shall enable the members of the Class, at little cost of time and labor, to become better acquainted than they would otherwise have been, with the character and position of the historical father of our science, I shall be doubly paid for the pains I have bestowed upon it.

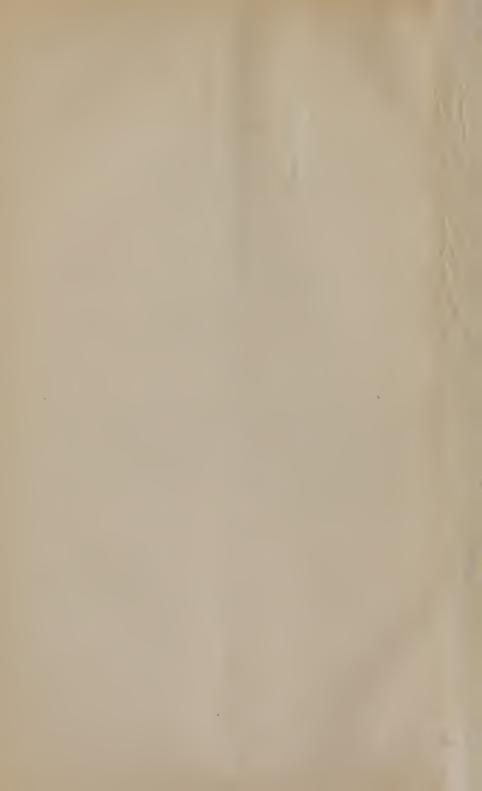
I have the honor to be,

Very sineercly, Your Friend,

ELISHA BARTLETT.

To Wm. H. Draper, Chairman, and Henry L. Sheldon, Secretary of the Committee of the Class.

CARLTON HOUSE, Oct. 15th, 1852.



Discourse.

Mr. President, Gentlemen of the Board of Trustees, and of the Medical Class:

Before reading the Essay which I have prepared for this occasion, I wish to be indulged in one or two explanatory remarks. It is very well understood, at least it is among the members of medical faculties, that the dignified and responsible office with which I am honored to-night, is not amongst those professional distinctions that are most earnestly coveted and sought after.

Indeed, unless it be by some very young or unfledged professor, whose untried pinions are aching with their inglorious and unwilling rest, and longing to show their eagle strength, and to unfold their glittering and unsunned plumage in the high heavens, where all may behold and wonder,—whose exuberant wisdom has yet found no fitting or adequate channels through which to diffuse itself, with all its renovating and fertilizing influences, over the arid and barren fields of medicine; except in some such cases, it is quite certain that these honors are rather carefully, and sometimes rather ingeniously, shunned.

I plead no exemption from this frailty of medical faculties. There are good reasons, in my own case, why this duty should have been regarded as an irksome and an undesirable one. I cannot answer for others, but for my own self I had nothing new to say upon any of the topics that make up the standing and stereotyped material for discussion on these occasions.

I had already, in the earlier, more imaginative, and more ambitious season of life, paid what I flattered myself might be considered an eloquent and glowing tribute to the honorableness, the usefulness, and the dignity of our profession; and what was worse, in the actual emergency, I had suffered that standing and perpetual phantom-looming again even now in the near distance before me—the committee of the class, to print it. I had added my little bundle of rays to that effulgent illumination, which the aggregated and organized wisdom and professional patriotism of the land had poured upon the subjects of medical education, medical schools, and medical reform generally, until we were almost blinded with excess of light. I had quoted Holmes,—throwing over the sober dullness of my prose the flashing splendors of his poetry. My jokes about infinitesimal globules, and wet sheets, and our amiable medical brethren-shall I call them ?-of the gentler sex, had all been cracked. My quiver was empty, every arrow, begged, or borrowed, or stolen, or really my own, had been shot away, and what could I do?

But knowing very well, as the last in-coming member of the Faculty, that the old fate awaited me, and not wishing to shirk any duty that fairly belonged to me, and that I could, in any degree, adequately perform, I had resolved beforehand to make preparation for the emergency, by a study of the writings of Hippocrates, with the intention of making them the subject of an Introductory Lecture. If I had had any doubts or misgivings as to the propriety of this choice, they would have been dissipated by the noble and eloquent tribute which you, Mr. President, paid to the great Greek physician, in the excellent address, so full of the highest wisdom and truth, with which you closed the course of instruction here, six months ago.

The task that I set myself, I have, during the leisure hours of the summer, partially accomplished; and I propose now to read to you a Discourse upon the Times, Writings, and Character of Hippocrates.

I wish to guard myself against a single possible imputation. For anything like a full or intelligent understanding of my subject, I have thought it necessary to sketch some of the leading and more characteristic features of the age in which Hippocrates lived. This has led me, unavoidably, to speak more or less of Greek history, literature, philosophy, and art. Now I should be sorry to have the fair name and the good report, which I hope always to maintain before you, damaged by the supposition that I could be guilty of any pedantic display of knowledge that does not fairly belong to me; and I wish here to state, in all frankness and sincerity, that I am not a Greek scholar. I have not a single claim to any such distinction. I have read the writings of Hippocrates entirely in the French translation of M. Littré.* The collateral information and illustrations necessary to the preparation of the Essay, I have derived mostly from the History of Greece, by George Grote, the tenth volume of which has just been published. This, with a few of the lives of Plutarch, a rereading of some portions of Homer, and a single volume of modern travels in Greece, constitute the sum and substance of my studies in this direction, and for this purpose.

Though aside from my subject, I will take the liberty of saying, that every American, and every lover of free institutions, is under the highest obligations to Mr. Grote, for the manner in which he has executed his great history, for the

^{*}E. Littré. Œuvres completes d'Hippocrate, traduction nouvelle, avec le texte en regard collationné sur les manuscrits et toutes les editions; accompagnée d'une Introduction, &c.—Vols. 1 à 6, 8vo. Paris, 1839-'49. Paris and New-York: J. B. Baillière.

spirit which pervades and animates it, and especially for his masterly and triumphant vindication of the principles, and the working of the democratical institutions of ancient Greece. The great principles of democracy have found, in the present age, no nobler champion than the English scholar and historian, George Grote.

The first portion of my Discourse will be occupied with three historical pictures, in which I have endeavored to bring before you some of the more prominent and characteristic circumstances of the personal history and surroundings of Hippocrates.

* * * * * * *

In one of the years of the 88th Olympiad, in the island of Thasos, fronting the Thrasian city of Abdera, there was sadness in the house of Silenus, for its young master had been seized with sudden and alarming illness:the fiery causus of the climate. The year had been marked by some meteorological and epidemic peculiarities. A little before the rising of Arcturus—that is, just previous to the autumnal equinox, and while this constellation was still upon the horizon, there had been heavy and frequent rains, with winds from the north. Towards the equinox, and up to the setting of the Pleiades, there were light rains with southerly winds. During the winter, the winds were cold, strong, and dry from the north, with snow. Towards the vernal equinox, there were violent storms. The spring was cold and rather wet, with winds from the north. Towards the summer solstice, there were light rains and the temperature was cool till near the approach of the dog-days. After the dog-days and until the rising of Areturus, the summer was marked by great heat; not at intervals, but constantly. There was no water. Summeretesien-winds were prevalent. From the rising of Arcturus

to the time of the equinox, there were rains with the wind from the south.

During the winter, the general health of the Thasians was good, excepting an epidemic prevalence of paralysis. At the opening of spring, the causus showed itself, and continued to prevail up to the autumnal equinox. During the early part of the season, the disease was mild; but after the autumn rains, it became more severe, and carried off a great many of its subjects. * * * Dysenteries prevailed also during the summer; and some patients with fever even, who had had hemorrhages, were attacked with dysentery: this happened to the slave of Eraton, and to Myllus. * There was much sickness amongst the women. Many had difficult labors, and were sick subsequently; this was the case with the daughter of Telebolus, who died on the tenth day after her confinement. * * When the causus proved fatal, death commonly took place on the sixth day, as in the cases of Epaminondas, Silenus, and Philiscus, son of Antagonas. * * * The parotid glands suppurated in the case of Cratistonax, who lived near the temple of Hercules; and also in that of the servant of Scymmus, the fuller.

But omitting any further details of the prevailing diseases of the year, let us return to the bed side of the young patient in Abdera. It is the third day of his disease; he has had a restless and distressed night, with some wandering of the mind; the symptoms are all worse in the morning, and his family and neighbors are anxious and alarmed. The occupations and order of that old Thasian household are interrupted and broken up. A fresh offering has been placed on the altar of the household Jove, standing in the center of the inner court. The sound of the flute and the cithera has ceased; there is no animated talk of the last winners

at the Isthmian or the Olympian games; the clatter of the loom and the domestic hum of the spinning wheel are no longer heard; the naked feet of the slaves and the women fall carefully and silently upon the uncarpeted floors, and an unwonted stillness reigns throughout the numerous apartments of the dwelling. There is no savory steam of roasting wild-boar from the kitchen, and the fragrant Thracian wine stands untasted on the table, with a few plain barley-cakes and a little salt fish.

Silenus lies in his sleeping chamber, in the quiet interior part of the house, adjoining the apartments of the women, farthest from the vestibule, and near to the garden. By the bed of the sick man, there is a small tripod stand, with a circular top, and upon it there is a statuette of Hercules, a bowl of warm barley-water, and a cup of oxymel.

Leaning her head on the foot of the bed and sobbing, sits, on a low stool, a young Greek woman, beautiful in her features, and graceful in the flowing outlines of her person, as the Thessalian maidens of Homer. There is a picturesque combination of barbarian rudeness and Grecian elegance in her appearance, not an unfitting type and expression of the age and state of society, in the midst of which she lived. Her feet and ankles are bare; she wears only a single garment—the long Ionic chiton of linen—with large sleeves reaching only a little below the shoulders, leaving uncovered, in their snowy whiteness, arms that might have rivalled those of the jealous queen of Olympus. A girdle fastens the robe loosely round a waist, like that of the Medician Venus, innocent of the deformities of buckram and whalebone. The light auburn hair is simply parted and carried back from the forehead, gathered in a knot on the crown of the head, fastened with a golden grasshopper, and held by a coif of golden net-work.

At the head of the bed, watching steadfastly and earnestly the appearance of the patient, is seated his physician, the already celebrated son of Heraclides and Phenaretes, Hippocrates of Cos. He has just entered the apartment, to make his morning visit. His sandals have been taken off, and his feet washed by a slave in the vestibule. He wears over his linen tunic a large flowing mantle of light fine woolen, suited to the season, not unlike the later toga of the Romans, fastened at the neck with a cameo of Æsculapius, and falling in graceful folds nearly to his feet. His hair is long, and both this and his beard are kept and arranged with scrupulous neatness and care. He is thirty years old, in the very prime and beauty of early manhood. His features, through these misty shadows of many centuries, we cannot clearly distinguish, but we see that his face is dignified, thoughtful and serene; and his whole aspect, manner and expression are those of high, antique breeding, of refined culture, and of rather studied and elaborate elegance.

His examination of his patient was long, anxious and careful. He saw at once that the gravity and danger of the disease had increased since his last visit. He inquired very minutely into the manner in which the night had been passed; and was told by the watchers that the patient had had no sleep, that he had talked constantly, had sung and laughed, and had been agitated and restless. He found the hypochondria tumefied, but without much hardness. The stools had been blackish and watery, and the urine turbid and dark colored. He noticed the temperature and feel of the skin, and he studied for a long time and with great solicitude the general manner and appearance, the decubitus, the breathing, the motions, and especially the physiognomy of the patient. The only circumstance in the examination that would have particularly attracted the attention of a

modern witness of the scene, would have been his omission to feel the pulse. With this exception, no examination of the rational symptoms of disease could have been more thorough and methodical.

Having satisfied himself as to the state of his patient, he retired to an adjoining room, followed by some of the attendants, to give directions in regard to the few simple remedies that he intended to use. The patient had already been bled, and had had a purgative of black hellebore. Hippocrates directed, that instead of the strained decoction of barley, which had been the patient's drink, he should now have honey and water—the favorite hydromel—that the bed should be made softer—the windows of the room still farther darkened, and that a warm flax-seed poultice, softened with olive oil, should be applied to the abdomen.

With a sad but decided expression of his fears as to the issue of the case, and a few kindly and pious words to the weeping wife, about the dignity, the solace, and the duty, in all our trials, of submission to the will of the gods, he gathered his mantle gracefully about him, had his sandals refitted by the slave who waited in the vestibule, and proceeded on his daily round of visits among the houses of the city.

* * * * * * *

And now, leaving the sterile island of Thasos, let us follow the young physician to another sick chamber—to a scene of domestic life, still further illustrative of that remote and wonderful period, with which we are concerned.

The time is a year or two later—it is the house of Pericles that we enter, and we stand by the death-bed of the great and venerable Archon. Every thing in the spacious apartment indicates the pervading presence—not of obtrusive grandeur, or of showy and ostentatious wealth,—

but of stately elegance, and of high, various, many-sided luxury, culture, and refinement. Philosophy, letters, and art breathe in the quiet atmosphere of the room; and the taste of Aspasia sheds an Asiatic grace over its furnishing and its decorations. In one corner stands a statue of Minerva, from the chisel of Phidias; and the walls are covered with pictures, fresh from the pencils of Panænus and Polygnotus, illustrating the legendary and historic glories of Greece. There might have been seen Thèseus, bearing off from the field of victory, on the banks of the Thermódon, the masculine and magnificent queen of the Amazons-half willing, perhaps, to be the captive of such a victor; Jason, in his good ship Argo, with his fifty selectest heroes, convoyed by the queen of love, the awful Hêre, and Apollo, winds his various and adventurous voyage, crowded with poetic imagery and romantic incident, and brings back the golden fleece from Colchis;-Helen, at her loom, is weaving into her "golden web" the story of the Trojan wars;—the chaste Penelope, by the light of her midnight lamp, undoes the delusive labors of the day; -- Ulysses, returned from his long wanderings, surveys once more, with boyish pride and delight, the dear old bow, which no arm but his could bend.

The central figure on that old historic canvas that I have endeavored to unroll before you, is that of the dying statesman. Raised and resting, in solemn and august serenity, upon its last pillow, lies that head of Olympian grandeur, which—I may say it without presumption—after the lapse of nearly twenty-three centuries, now finds, for the first time, its fitting representative and likeness—as the character and career of the great Athenian find their counterparts also—in that illustrious orator and statesman, who now walks in solitary majesty amongst us—the pride,

the strength, the glory, of the Republic—the Pericles of our Athens—whose Acropolis is the Constitution of his country—whose Propylæa are the freedom and the federation of the States.**

Added to the calamities of that long and disastrous internecine struggle between the two rival cities of Greece, which had just begun, Athens was now afflicted with that terrible visitation of the plague, the history of which has been left to us by Thucydides; and Pericles was sinking under a protracted and wearing fever—the result of an attack of the disease.

His long and glorious life is about to close. He had been, for more than an entire generation—if never the first Archon, and not always the most popular-by common consent the most eminent citizen, statesman, and orator of the republic—the great defender of her constitution—the champion of her freedom and her rights—the upholder and the magnifier of her renown. Political rivals, disappointed partisans, and a few malignant personal enemies, and professional libellers and satirists, had been hostile to his career, and had endeavored to blacken his fair fame; but his strong and unshaken democratic faith—his far-seeing sagacity—his firmness and moderation—his enlarged, liberal, humanizing, conservative, and pacific policy-his moral courage and independence, and his high public probity, had triumphed over them all; and although by braving the prejudices of his friends and supporters, in his devotion to the general weal, he had gathered over his declining sun some clouds

^{*}These few words of allusion to Mr. Webster can hardly fail to be read without something of a sad and mournful interest. In less than a fortnight from the time when they were spoken, the great Senator and minister had closed his earthly career, crowning his long and brilliant life of public service with the serene and sublime death of a Christian philosopher;—the simple wreath intended for the brows of the living statesman has fallen pon his tomb.

of public disfavor—the sense of justice, and the feeling of gratitude in the minds of his countrymen were quick to return—the clouds were already scattered, or they served only to deepen and reflect the setting splendor which, for a moment, they had intercepted and obscured.

Many of his near personal friends and relatives had already fallen victims to the pestilence. Both his sons had perished, and the young Pericles—the child of Aspasia—had been sent away, with his mother, for safety, into Thessaly. Phidias, and his old teacher, Anaxagoras, his

"Guide, philosopher, and friend,"

had died a little while before the breaking out of the epidemic. Those who were left had now gathered around the bed of the dying Archon, to receive the rich legacy of his parting words, and to pay to him the last solemn and kindly offices of life.

Not often in the world's history has there met together a more august and illustrious company. These are a few of those whom we are able to recognize amongst them. Resting his head on the shoulder of Socrates, and sobbing aloud in unrestrained and passionate sorrow, leans the wild and reckless Alcibiades—just in the first bloom of that resplendent personal beauty which made him seem to the eyes, even of the Greeks, more like the radiant apparition of a young Apollo, than any form of mere earthly mouldsubdued, for the first time in his life, and probably for the last—by the spectacle before him, of his dying relative and guardian-to reverence, tenderness, and truth. Sophocles, his old companion in arms, is there; and near him, in his coarse mantle, and with unsandaled feet, may have stood a grandson of Aristides, still poor with the honorable poverty of his great ancestor.

Conspicuous amidst this group of generals, admirals,

statesmen, orators, artists, poets, and philosophers,—in rank and fortune, in social position, in reputation, in learning, culture, and refinement, their equal and associate, sits the young physician of Cos. Already had his rising fame reached Athens, and when the city, overcrowded with the inhabitants of Attica, driven from their homes by the armies of Sparta, was smitten with the pestilence, he was summoned from his island home in the Ægean, to stay, if he could, the march of the destroying angel, and to succor with his skill those who had fallen under the shadow of its wings.*

* * * * * * *

On a gentle declivity, looking toward the south-west, in the small island of Cos, lying in the Ægean sea, a few stadia

* Mr. Landor in his Pericles and Aspasia—that most exquisite work of historical fiction—so imbued with antique elegance and beauty, makes Pericles say to his

"Wisest, loveliest, latest friend,"

in his last letter, so full of solemn and affectionate tenderness and pathos;—
'Reviewing the course of my life, it appears to me, at one moment, as if
we met but yesterday; at another, as if centuries had passed within it; for
within it have lived the greater part of those who, since the origin of the
world, have been the luminaries of the human race. Damon called me from
my music to look at Aristides on his way to exile: and my father pressed
the wrist by which he was leading me along, and whispered in my ear,
"Walk quickly by; glance cautiously; it is there Miltiades is in prison."

'In my adolescence I offered the rites of hospitality to Pindar and Empedocles; not long afterwards I embraced the neck of Eschylus about to abandon his country. With Sophocles I have argued on eloquence, with Euripedes on polity and ethics; I have discoursed, as became an inquirer, with Protagoras and Democritus, with Anaxagoras and Meton. From Herodotus I have listened to the most instructive history, conveyed in a language the most copious and the most harmonious; a man worthy to carry away the collected suffrages of universal Greece: a man worthy to throw open the temples of Egypt, and to celebrate the exploits of Cyrus. And from Thucydides, who alone can succeed to him, how recently did my Aspasia hear with me the energetic praises of his just supremacy!

'As if the festival of life were incomplete, and wanted one great ornament to crown it, Phidias placed before us, in ivory and gold, the tutelary deity of this land, and the Jupiter of Homer and Olympus.

'To have lived with such men, to have enjoyed their familiarity and esteem,

from the coast of Asia Minor, stands the temple of Æsculapius. Its Ionic columns, and its ornamented friezes of Pentelican marble, glitter and flash in the sun-light, as we watch them through the swaying branches of the ancient oaks, chesnuts, and elms, that make the sacred grove of the temple. In the center of the principal room, or cella, of the temple, and fronting the entrance, stand statues of Æsculapius, and his daughters, Hygiea and Panacea. On each side of the entrance are marble fonts of lustral water, for the preliminary purification of the sick visitors to the temple.*

Near a column of the temple, and holding a roll of papyrus in his left hand, stands Hippocrates. Gathered about him, in picturesque little groups, there is a company of Greek youths. Their tasteful and elegant costumes, their earnest and intelligent faces, and their general air and bearing, all show plainly enough the superior refinement and culture of the class to which they belong. They are medical students, young Asclepiades, who have assembled here from the several states of Greece, to acquire the clinical skill and exper-

overpays all labors and anxieties. I were unworthy of the friendships I have commemorated, were I forgetful of the latest. Sacred it ought to be, formed as it was, under the portico of Death. . . My friendship with the most sagacious, the most scientific, the most beneficent of philosophers, Acron and Hippocrates. If mortal could war against Pestilence and Destiny, they had been victorious. I leave them in the field; unfortunate he who finds them among the fallen.'

* The most delightfully situated and salubrious localities were selected for the temples of Æsculapius; and the favorite sites were the islands and promontories of the Ægean, in the neighborhood of the sea. Mr. Aubrey de Vere, a recent traveller in Greece, thus speaks of Epidaurus: "Its screne beauty remains; and if quiet scenes, fit to store the mind of a sufferer with images of peace, if cold groves, if dewy and seeluded pastures, and gales as refreshing as ever descended from the fields of sleep, to fan a fevered brow, be auspicious to health, the region of Æsculapius is still potent to remove some real maladies, and many an imaginary disease."

rience of the great surgeon and physician of Cos, and to listen to the eloquent lessons of the illustrious professor.

Thirty years have gone by since we met him at the bedside of the dying Pericles. The lapse of this generation has thinned his flowing hair, and sprinkled his beard with silver.

It would be gratifying if we could know something of his personal history during this long and active period of his life. We know but little, however, and this little is dim and shadowy. That he had led a life of activity and usefulness, and of growing reputation, and that he had visited various portions of Greece, is certain. What he himself had witnessed, and must have felt, we know well enough. He had seen, for this whole period, his country torn and distracted by civil war—state arrayed against state, city against city; he had mourned over the disastrous expedition of Athens against Syracuse; and shooting athwart all the murky darkness of this troubled and stormy period—instead of the benignant sun of Pericles—the baleful rays of the star of Alcibiades, setting at last, but too late for his country, in ignominy and blood.

I have not departed from the strictest limits of historical probability, in assigning to Hippocrates the high powers of didactic and persuasive oratory. One of the most potent agencies in the development of Greek intellect, and the advancement of Greek civilization, consisted in the general prevalence of public teaching and recitation. For many successive centuries, it was from the living lips of bards and rhapsodists, kindled with coals from the glowing altars of patriotism and religion,—and not through the medium of any cold and silent written records, that the immortal strains of the Iliad and the Odyssey rang through the land, and were made literally familiar as household words. Even up to an advanced period of Grecian culture, the art of writing

was but little practiced; and it was by speech, and not by reading, that statesmen, poets, orators, philosophers, and historians acted upon their disciples and the public. Then, the evidence derived from his writings is full and conclusive, that Hippocrates was not merely a skillful physician, but that he was learned in all the philosophy and literature of his age. Plato speaks of the Asclepiades, his cotemporaries, as men of elegant and cultivated minds, who, in the explanations they give to their patients, go even to the heights of philosophy. It is no violation, then, of historic probability, to presume that the great philosophic and practical physician—who had been trained in this unrivaled school of human speech—who had listened to the eloquence of Pericles in the public assemblies, or been charmed by "the colloquial magic of Socrates," in the market-place, should have been himself, also, a master of this high power of instructive and persuasive speech. It is by no forced or illegitimate exercise of the fancy, that we look back to the scene I have endeavored to sketch. And with little danger of departing far from the truth, we may imagine what would be likely to constitute the theme of his discourse, especially if the occasion was one of unusual interest or solemnity, such as the opening or closing of one of his courses of instruction -the Introductory Lecture-or the Valedictory Address to the graduating class of the school of Cos, at the term of the first year of the 95th Olympiad.

The character of Hippocrates, his position, his close observation of nature, his knowledge, his philosophy, the times in which he lived, the circumstances which surrounded him, all conspired to make him a polemic and a reformer. He would probably take such an occasion as that of which I am speaking, to lay down and to vindicate the great principles of his system; and he would be likely to begin with an ex-

position of the errors of medical doctrine and practice, most important and most generally prevalent. I do not suppose that our illustrious historical father was wholly exempt from the infirmities of our common nature; and it is very possible that in his animadversions upon the system of his Cnidian neighbors, there were mingled some ingredients more spicy than Attic salt; and he may have indulged, perhaps, in some allowable self-congratulation, that the class at Cos was so much larger than that at Cnidus.

I suppose, however, that as President of the college, he would, in a graceful and dignified exordium, give his greeting and welcome to the members of the class; he would express his gratification at seeing so numerous an assemblage from so many of the states of Greece—from the North and the South, the East and the West—from Attica, and Beotia, and the Peloponnesus—from distant Sicily, and even from Egypt.

After this, or some similar appropriate introduction, he would probably continue by warning his hearers against the subtle and dangerous errors of superstition—of the old theurgic faith. He would speak of the great revolution that had so recently taken place in the Greek mind, even then only partially accomplished; he would describe in colors such as only he could use, who had felt this change in his own spirit, and who had witnessed it all about him—the gradual dawn and the final rising of the central, solar idea of a simple spiritual theism, of fixed laws, of invariable relations and sequences of events, in the economy of nature. As he sketched the outlines of this great and pregnant history, he could hardly fail to linger for a moment, with something of the passionate enthusiasm of his early years, and with something also of their strong and simple faith, upon that gorgeous theurgic and mythological creation of the Greek mind, which marked its legendary and religious period. He would speak of this mythology, and its various and beautiful legends, in no cynical or bigoted tone, but with philosophical toleration, and with something even of loving sympathy and admiration. He would say it was the genial and natural product of the quick, susceptible, many-sided Greek mind, in the period of its childhood and adolescence. Kindling with his old enthusiasm, he would have likened that early age, peopled with its gods and demi-gods, its beautiful women and heroic men, to its own young Apollo-the bloom of immortal youth on his beaming forehead, his flowing locks sweet with the ambrosia of the dewy morning of life, and all his form radiant with a divine beauty. He would have said that the present high civilization of his country was in a great degree the growth of seed planted in that genial soil, and nurtured by that genial sun; that Greek character, and art, and philosophy, are all still steeped in the glorious light of the old Homeric age.

In the third place, he would have warned his hearers against the seductive but dangerons influences of the philosophers. These men, he would have said, are, for the most part, idle dreamers, and they are nothing else. I know them well. They affect superior wisdom, and they look down disdainfully upon the physician, and the patient observer of nature. They seem to think that the economy of the universe, including the human system, in health and disease, can be ascertained and understood by a sort of intellectual divination, which they call wisdom and philosophy, but which is in reality only empty hypothesis and idle speculation. He would then have entered into an examination of these systems; he would have exhibited their radical errors and defects—he would have compared them with the humbler philosophy of observation and experience, and he would have

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shown that they had accomplished nothing, and that in the very nature of things they could accomplish nothing, for the advancement of real knowledge.

As he gazed upon that most impressive spectacle before him,-so many of his young countrymen, gathered at the peaceful summons of science and humanity from all portions of the Grecian territory, filled with hope, with ardor, with promise, life's full and radiant future stretching far and fair before them,—a cloud of sadness could hardly fail to throw its shadow over his features, as he remembered the long thirty years of civil discord, of deadly internecine strife, through which his country had just passed; and his closing words could hardly fail to rise into a patriotic and Pan-Hellenic hymn, the burden of which should be, that the glory, and happiness, and safety of Greece, were to be found in the union of her states; that they whom he addressed—his young friends and disciples—were the common and equal heirs of the glory of Marathon and Thermopyle; that they all spoke the language of Homer; that while they need not forget, but might be proud even, that they were Spartans, or Athenians, or Thebans, or Thessalians, they ought to remember with a higher pride, that they were also, and more than all, Greeks; that they had a common country, and that a common destiny awaited them.

One essential element and condition of any adequate knowledge of any subject whatever of human inquiry, consists in a knowledge of its relations. The history and character of a nation can only be understood by understanding first the history and character of the nations and peoples to which it has held relations, and all the influences that have surrounded and acted upon it. So it is with the sciences—with religions—governments—philosophies—literatures—art; so it is, I hardly need say, with individuals. To know

them, we must know the elements in the midst of which they lived—the influences that surrounded them—upon which they acted, and which re-acted upon them.

Preliminary then to any attempt to analyse and estimate the character and works of Hippocrates, we must have some satisfactory notion of the times, and the circumstances, during which, and in the midst of which, this character was built up, and these works were done. Something of this I have already anticipated, in the three historical sketches, in which I have endeavored to bring before you the subject of our evening's study. I will now, however, attempt to indicate, a little more formally and methodically, some of the leading political, social, and intellectual elements, in the midst of which Hippocrates lived and worked.

And first let me state to you the little that is positively known of his personal history. Gratifying, indeed, would it be to us, if we could follow him from city to city, and from house to house, in his professional wanderings through Greece—to witness his examinations of his patients, and his methods of treatment—to listen to his opinions—to hear his colloquies with the philosophers—his controversies with the Cnidian physicians—his lectures to his pupils—and to look in upon all the common routine of his daily life; but the shadows of many centuries have settled down upon all these circumstances, and shut them out from us forever.

It is the opinion of M. Littré, that nearly all the incidents of his personal history, related in his various biographies, are wholly wanting in authenticity, and that many of them are entirely improbable.

It seems that the most direct and authentic cotemporary personal record of him is contained in one of the dialogues of Plato. "Tell me, O Hippocrates," says Socrates, the interlocutor, "if thou shouldst go to find thy namesake,

Hippocrates, of Cos, of the family of the Asclepiades, and shouldst give to him a sum of money on thy account, and if it was asked to what personage thou hadst carried the money, what wouldst thou reply? That I had carried it to him, in his quality of physician. For what purpose? To become a physician myself."

As M. Littré remarks, this passage of Plato shows that Hippocrates was a physician of Cos—of the family of the Asclepiades—that he was a teacher of medicine, and that his lessons were not gratuitous—that he was a cotemporary of Socrates—and that during his life-time, his fame had found its way to Athens. Hippocrates is also cited by Plato, as a writer.

Another testimony to the estimation in which Hippocrates was held, is furnished by Aristotle. This philosopher—the most learned of the ancients—was the disciple of Plato, and must have been familiar, not merely with the written works of Hippocrates, but with the traditional esteem in which his name was held. Aristotle says, incidentally, in his polities, "When we speak of the great Hippocrates, it is understood that we mean, not the man, but the physician."

The period of his birth, and a few facts of his family history, seem to be well settled. He was born in the first year of the 80th Olympiad, 460 years before the birth of Christ. He was the son of Heraclides and Phenaretes. He had two sons—Thessalus, and Dracon, 1. Thessalus was physician to Archelaus, king of Macedonia; and two of his descendants—a son and a grandson—were physicians to Roxana, wife of Alexander the Great. This brilliant fortune of the family probably grew out of the fame of the ancestor.

His death is said to have taken place at Larissa, in Thessaly, at an advanced age. He was buried between Gyrton and Larissa, where his tomb was formerly shown; and which

the Greeks pleased themselves with saying was for a long time the home of a swarm of bees, whose honey was celebrated for curing the aphthous mouths of children.

The period embraced in the life of Hippocrates includes, and may be almost said to limit, the most brilliant epoch of Greek civilization; and I suppose it is no exaggeration or extravagance to say, that in many of the forms of intellectual achievement—in polity—in poetry—in oratory—in art—in speculative philosophy—in subtle and discursive thought—in æsthetic and ethical culture—and in general intellectual activity, development, and progress, that period has never since had its parallel. As Milton says of our first parents:

"Adam—the goodliest man of men since born— The fairest of her daughters—Eve."

The birth of Hippocrates corresponds, almost exactly, to the secure establishment of national independence in Greece. The battle of Marathon—that first, fiery baptism of the infant democracy of the early world, was fought thirty years before he was born. He had listened to the story of Thermopylæ, and Sálamis, and Platæa, from the living lips of the survivors of those victorious fields. He had been told, as he stood at his mother's knee, of that day of humiliation, when the Persian monarch, with the kings of Tyre and of Sidon, held their synod in the Acropolis of Athens, to deliberate upon the fate of Greece, and to partition amongst themselves and their allies its subject territories.

During the period between the defeat of the great army of Xerxes, and the birth of Hippocrates, the Persian power had been utterly swept from the Grecian territory; the Ægean sea had become wholly Athenian; its islands were the allies or the tributaries of Athens, and the cities even of the Asiatic coast were restored to their old Hellenic relationship.

tions. The entire freedom of Greece from foreign domination, and from any present danger of disturbance from without, had been secured; the Pan-Hellenic battles of independence had been fought—Athens had become the imperial mistress of the Ægean, and the ascendant Grecian state; her democratical institutions had been developed and established—and thus the conditions had been fulfilled, and the foundations laid, of that Ausonian era which occupied the thirty years immediately following the birth of Hippocrates.

Without entering into any details, it is sufficient to say of this period, that it was the age of Pericles: and perhaps I can bring before you the intellectual activity and greatness of the Grecian world, during the life of Hippocrates, in no manner more striking and satisfactory, than by a simple enumeration of the leading cotemporary names in philosophy, letters, and art, of that period. For this purpose, we may divide the long life of Hippocrates into three nearly equal portions, of about thirty years each, corresponding, as they do, pretty nearly, to very well marked eras in Grecian political history.

The first of these periods, as I have just stated, occupying the first generation of the life of Hippocrates, extends to the death of Pericles. This great man has worthily and appropriately given his name to this period—it was the age of Pericles; and the man and the age were worthy of each other.

So far as art is concerned, it is sufficient to say, that during this period, the Acropolis was covered with those architectural structures, which are still, in their ruin, as much the wonder and admiration of the world, as they were the pride and glory of Athens, on the day when they were finished—glittering in the morning sun, with no spot upon the resplendent whiteness of their Pentelican marbles, and

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no line of their sculptures and decorations touched by the fingers of Time. The gold and ivory statue by Phidias, of Minerva—the planter of the sacred olive, and the tutelary Divinity of the city—was dedicated when Hippocrates was twenty-three years old, and it is in no way improbable, that the young student came up from Cos to Athens, to witness the august and joyous ceremonial.

Æschylus, the founder of Greek tragedy, died when Hippocrates was in his childhood; his successors, Sophocles, and Euripides, were, the first, thirty-seven, and the second, twenty five years, his seniors. Anaxagoras was forty years older, Socrates ten years older, and Democritus one year younger than Hippocrates. Herodotus was twenty-four, and Thucydides eleven years, his seniors; and Xenophon, to complete the great historical triumvirate, was fifteen years his junior.

The second period of the life of Hippocrates, as I have here divided it, extends from about the time of the death of Pericles, to the close of the fifth century B.C., or a very little later, to the death of Socrates-that sorrowful but sublime tragedy in the history of humanity. This period is occupied by the Peloponessian war. These were long and disastrous years for all Greece, but especially for Athens. Her fair, discrowned head was bowed in the dust; her wide empire was subverted: and at last, to crown her sorrows and reverses, her free, democratical constitution had been overthrown, and supplanted by one of the wickedest and bloodiest oligarchical tyrannies that ever cursed and blighted the earth with its presence. But through all these disastrous vicissitudes-through poverty-through faminethrough defeat-through manifold humiliation and discouragement, at home and abroad, she still maintained, unbroken and unimpaired, her intellectual activity and supremacy. The active lives of many of the great men whose names I have already mentioned, extended through this second generation of the era of Hippocrates: and others hardly less illustrious were added to them. The first comedy of Aristophanes was exhibited two years after the death of Pericles, when Hippocrates was thirty-three years old.

Of the third period, extending from the close of the Peloponessian war, or from the death of Socrates to that of Hippocrates, it is special and peculiar glory enough for it, to say, that it was illustrated and made immortal by the teachings of Plato, and that its close was lighted up by the dawning sun of Aristotle.

The father of Demosthenes died when Hippocrates was 82 years old, and during some visit to Athens he may have heard the broken prattle of that boyish voice, whose fiery utterance was afterwards to stir the hearts of his countrymen, like the call of the trumpet to battle. If he lived to be 87, which is not at all improbable, he witnessed the brief but splendid and beneficent career of the great Theban, Epaminondas.

I have omitted from this august catalogue, excepting those of Pericles and Alcibiades, the names of the many generals and statesmen, who illustrated by their courage, patriotism and virtue, or darkened by their selfishness, treachery and vices, the military and civil history of this long and eventful period.

Another intellectual and moral element in our estimate of the character of Hippocrates consists in the religious condition of the age in which he lived. In no period of the world's history, and amongst no civilized people, has this great element exerted a more powerful influence. That wonderful, flexible, many-sided, genial, self-originating, expansive Greek intellect and civilization had two foster-

nurses, and these were Poetry and Religion. From their breasts she drew that life-giving nectar, and from their lips that divine afflatus that lifted her into communion with the gods, and made her name immortal amongst men. And this religious faith of the Greeks was not confined to their legendary and mythological age: it was almost as strong, universal and all-pervading during the whole period of the life of Hippocrates, as it was in the Homeric or ante-Homeric ages.

This faith was no cold abstraction, no merely speculative and nominal belief, but a solemn, practical, ever-present, overshadowing reality, interfusing and interpenetrating all Grecian thought, feeling and life. The belief of the Greek of the fifth century B.C., in the constant, immediate, all-controlling agency and interference of the gods in human affairs, was as implicit and as unqualified as that of the Hebrew in the one true God. Not only all their temples, but almost every house, and street, and market place had its tutelary divinity, its fonts of lustral water, and its altars for sacrifice. All the great games and festivals were either for formal and solemn religious purposes, or they had something of a religious significance and end. Turning into indecent ridicule the holiest rites of the Christian church would hardly excite in the mind of a devout Catholic a more intense feeling of horror, than a similar act of profanation of the Eleusinian mysteries would have excited in the mind of a Greek of the time of Hippocrates.

And this faith was not confined to the uneducated masses. No great enterprise was undertaken, without solemn consultation of oracles, sacrifices and libations. Private and public conduct, the actions of individuals, and the movements of fleets and armies were constantly governed and directed by what were believed to be the immediate and visible in-

terpositions of the gods. The fatal expedition of Athens against Sicily came near being abandoned, in consequence of the religious terror occasioned by the secret and general mutilation, during the night, of the Hermæ in the streets of Athens.* Thucydides in closing his history of the same expedition, and of the death, by his own hand, of Nicias, one of its leaders, expresses his surprise that so pious a man, so remarkable for the exact performance of his duties to the gods, should have suffered such great reverses and calamities.† Xenophon, before he joined the ten thousand Greeks in their expedition into Asia, had doubts as to his duty, and the rightfulness of the undertaking: his friend Socrates advised him to apply to the oracle at Delphi for the solution of his doubts, which he did.

Another element of Greek intellect and civilization still more intimately connected with the position, character and labors of Hippocrates than that I have just been considering, is to be found in the cotemporary Greek philosophy. I can touch upon this subject only so far as it directly concerns the position of Hippocrates, and the state of Greek medicine. The Greek philosophers, from Thales to Aristotle, were a very remarkable body of men. It is enough to say of them, in relation to my present purpose, that they speculated upon almost every subject of human thought and inquiry. They may, properly enough, be divided into two classes, depending upon the nature of the subjects which principally occupied their attention. One class devoted themselves mostly to moral, ethical, metaphysical, and political studies; and the other to speculations relating to the material creation -to man and to nature. The philosophies of the latter embraced what their authors intended for comprehensive and

^{*} Grote's History of Greece, vol. vii. p. 227. † Ibid. vol. vii. p. 480.

complete schemes of creation, and systems of nature,—including in their vast scope the entire universe in all its relations, and of course all the sciences,—astronomy, physics, mathematics, and medicine. They speculated upon the origin of things,—the nature and composition of matter,—the causes of physical phenomena, and so on.

Each of these philosophers indulged in speculations peculiar to himself; each framed his own cosmogony, or system of nature. Their general character is obvious enough. Mingled with the slenderest and scantiest material of positive knowledge, they consisted in vague, shadowy, hypothetical, à priori speculations and conjectures in relation to external nature and to all physical subjects.

There was one result of this speculative inquisition into the economy of nature, which it is important to notice. I mean the tendency to skepticism, in regard to the popular mythology which it engendered, and the conception, in its stead, of a simple monotheism—of a single Supreme Intelligence—acting throughout all nature by a fixed and invariable system of laws.

This was the beginning of that new battle of the Titans—the Homeric hosts—radiant, shadowy, terrible, august,—heroes and demi-gods, and the gods of Ida and Olympus; Zeus, with his thunderbolts; Helios, with his fiery coursers; Poseidon, with his trident; Here, and Athene, and Artemis, and Aphrodite, and Demeter, on one side; and on the other, one single force only, marching upon the adverse armies, like the silent but irresistible coming of the ruddy dawn—the still, clear, serene, inexorable light of positive science and philosophy.

It was in the midst of this transition movement, that Hippocrates lived, subject to all its influences, and taking an active part in all its interests. In estimating his character, it is a capital element that he was in advance of his great cotemporaries. The two most illustrious of these were Socrates and Plato, and their philosophy was only partially emancipated from the old religious faith. Socrates taught that the most comprehensive and important class of natural phenomena had been reserved by the gods, for themselves and their own unconditional agency, wherein there was no invariable or ascertainable sequence, and where the result could only be foreknown by some omen, prophecy, or other special inspired communication from themselves. Physics and astronomy, in his opinion, belonged to the divine class of phenomena, in which human research was insane, fruitless, and impious. Plato held the sun and stars to be gods, animated each with its special soul; he allowed astronomical investigations only to the extent necessary for avoiding blasphemy respecting these beings. The poets, Pindar, Æschylus, and Sophocles, held the same unquestioning faith in the substantial reality of the old mythological persons and events. The great historians, Herodotus and Thucydides, struggled between the two tendencies. Although led by their prevailing habits of thought to study and estimate historical evidence, and the creation thus in their minds of a historical sense—as Grote calls it—in regard to the past, as well as the present, they still maintained their faith in the literal existence of the gods.

"The Greek," in the words of Grote, "instead of a sun, such as we now see, subject to astronomical laws, and forming the centre of a system, the changes of which he can ascertain and foreknow, saw the great god Helios mounting his chariot in the morning in the east, reaching at noonday the height of the solid heaven, and arriving in the evening at the western horizon, with horses fatigued and desirous of repose." Plato protested against the impudence of Anaxagoras, when

he degraded the divine Helios and Selene into a sun and moon of calculable motions and magnitudes.*

Certainly, I need not insist upon the formidableness of the obstacles presented by this religion and philosophy, to the progress of all sound and stable medical doctrine, and of all natural science whatever; nor upon the clearness and acuteness of that insight which penetrated and dispelled the darkness of these inevitable but stupendous delusions.

In endeavoring to form a correct estimate of the character of Hippocrates, it is necessary to keep in mind the state of medicine, at his time, and before. It is a great mistake to suppose, that Hippocrates was the literal creator, or founder, of the science and art of medicine. He may be called the historical father of medicine, but not its author, discoverer, or inventor. There was a wide and various Greek medicine, older far than Hippocrates—a medicine that he found already more or less formed to his hands—generally practiced, and formally taught in the systematic writings of physicians and philosophers. Two editions had been published of the Cnidian sentences, by Euryphon, a cotemporary of Hippocrates, but ten years older than he.

The antiquity of this Greek medicine is attested in the Homeric poems, and the great esteem in which its practitioners were then held. Machaon is constantly called by Homer, "the Great":

"A wise physician, skilled our wounds to heal, Is more than armies to the public weal."

Eurypylus says-

[&]quot;Of two famed surgeons, Podalirius stands
This hour surtounded by the Trojan bands;
And great Machaon, wounded in his tent,
Now wants the succor which so oft he lent."

^{*} Grote's Greece, vol. viii, p. 597.

M. Littré refers the body of medical doctrine and practice, which already existed at the time of Hippocrates, to three principal sources. The first of these, and the most important, was the experience, traditional and recorded, of the Λsclepiades, the priest-physicians of the various temples of Æsculapius. These temples, it is well known, were numerous, and had existed for a long time. The most celebrated were those of Epidaurus, Tricca, Cnidus, and Cos. The most delightful and salubrious spots were selected for their sites, often in the neighborhood of the sea; they stood in a spacious enclosure of high walls, and were surrounded by sacred groves. The principal room, or cella, sometimes contained statues of Æsculapius, and his daughters, Hygiea and Panacea.

The sick who visited the temples for relief, were subjected, under religious forms, to a preparatory regimen, consisting of prolonged abstinence, or a rigorous diet, and various purifying ablutions and inunctions of the body. After these preliminaries, a night was passed in the temples, and the patients subjected to the treatment ordered by the Asclepiades. A certain number of the patients who had been cured, left in the temples votive tablets, grateful offerings to the gods, containing brief records of their diseases and their cure. Strabo says, "The temple of Epidaurus is always full of the sick, and of tablets on which the treatment is inscribed; and it is the same at Cos, and at Tricca."*

The second source of medical knowledge in the time of Hippocrates was to be found in the studies and teachings of the philosophers. These men included in their comprehensive systems of nature, the organization and functions of animals, and human physiology and diseases. Amongst the most celebrated of these were the Pythagoreans of the medi-

cal school of Crotona, in Italy. The most learned and universal of them was Democritus.

The third source of this ante and cotemporary Hippocratic medicine was to be found in the gymnasia. These, it is well known, were amongst the primary, organic institutions of Greece; they constituted one of the great elements of Greek civilization. They were among the chief means of that fine physical development which furnished so befitting and adequate a material soil, for the growth and nutriment of the Greek intellect. In these institutions were developed and perfected the forms that were embodied in marble by Phidias and Praxitiles. What a pity it is, that we are so far behind the old Greeks in those institutions and habits that reared up, instead of the pale and sickly effeminacies of our degenerate days, those manly and heroic shapes that were represented by Apollo, and Antinous, and Mercury; and that superb and consummate physical womanhood, embodied in the Junos and Hebes-the Minervas and Dianas, of Greek art and religion!

Gymnasia existed throughout the whole of Greece—devoted to the same purposes, and answering the same end—from the terrible and tyrannical rigor of Spartan discipline, to the more refined and genial culture of Athens.

The effect of this methodical, physical training—of the bodily exercise—the various exposure—the ablutions and inunctions of the skin—the dietetic discipline and indulgence of the appetites and passions—all carried on in public, and under the direction of experienced guides and teachers—the effects of all this upon the preservation of health, and the prevention of disease—could not fail to be noticed—and in this way there would soon come to be established a body of sound hygienic doctrine.

But something more than this is true of the Greek gym-

nasia. They came to be, very generally, establishments for the methodical and formal treatment of diseases. The Asclepiades, it seems, i. e., the regular physicians of that day—our Greek brethren of the Orthodox school—were, to a great extent, specialists—confining their practice mostly to the treatment of wounds and injuries, and of acute diseases; and one of the results of this usage was, that patients with chronic diseases placed themselves under the care of the gymnastic hygienists.

How the old times, and the old things—the old truths, and the old errors—with their inherent and indestructible vitality—perpetually reproduce themselves! The nervous votary of fashionable life in Athens—the victim of ennui, indolence, and an aimless and frivolous existence—impelled by a restless longing for novel and untried excitements—failing to get well of her real or imaginary ailments, under the treatment of the regular Asclepiad, who held his diploma from Cos, or from Cnidus—fled to the gymnastic cure at Athens, or Tarentum: as her modern representative, tired of Dr. Jones, and Dr. Johnson, flies for solace to the globules of Dr. Grabemteit, or to the wet sheets and douches of Northampton and Brattleboro.*

Such was the triple basis of ante, and cotemporary Hippocratic medicine. Diseases were formally and actively treated by the Asclepiades—in the temples and in private; short records of a certain number of these cases were preserved; hygiene was studied in the gymnasia; animals were dissected at Crotona and Agrigentum,—and the philosophers endeavored to cöordinate, to interpret, and to rationalize the teachings of the physicians and the hygienists.

^{*}Herodicus, master of a medical and hygienic gymnasium at Athens, directed his patients to walk, without resting, from Athens to Megara and back again.

It is true, then, that Hippocrates entered upon a field already alive and busy with a certain degree and variety of scientific activity; and that he found already accumulated, and more or less prepared to his hands, an aggregate, by no means small or unimportant, of authentic observation—recorded, and traditional. Even Hippocrates had his past—there was a medical history older than himself.

The Persian kings, more than a hundred years before the time of Hippocrates, were in the habit of employing Greek physicians, attached to their courts. The singular history of Democides is a curious illustration of the condition, and the social position of physicians at that time. He was the first, says Grote, of those many able Greek surgeons, who were seized, carried up to Susa, and there detained for the great king, his court, and harem.

In studying the character and position of Greek medicine, at the time of Hippocrates, and in estimating its scientific claims and pretensions, it is important to notice how little of it came from abroad. The Greeks derived their earliest notions of astronomy from the Chaldeans, but there is no evidence that medicine had ever advanced beyond the lowest and rudest condition, on the banks of the Tigris and the Euphrates. We are told by Herodotus, that in the city of Babylon, the sick were brought to the market places, and exposed to the examinations of the public, for such rude assistance as any chance comers might offer.

By the Egyptian priesthood, it is true, medicine was more formally cultivated. But although at the time of Hippocrates, Egypt had been opened to Greece for two hundred years, and although it is well known that many of the Greek historians, poets and philosophers visited this elder seat of civilization, and studied its character and institutions, it does not appear that Greek medicine was indebted in any con-

siderable degree to that of Egypt. If Greece received any thing from Egypt, it was like the wheat taken from her dark old sepulchres, where it had lain dormant for ages, and which germinated, and brought forth its full-headed and golden sheaves, only when planted in her own pregnant and prolific soil. The character of the Egyptian mind, and of Egyptian institutions, fixed, stationary, shackled, unexpansive, was adverse and unfriendly to the origin and development of any arts or sciences, requiring independent and various observation. On the contrary, the fact of which I am speaking, in regard to Greek medicine, finds its natural and obvious solution in the character and qualities of the Greek mind. This mind was wonderfully quick, susceptible, apprehensive, and to a great extent it was free. Grote calls the Greek "flexible, many-sided, and self-organizing." "The Iliad and the Odyssey," he says, "demonstrate, in the primitive Greeks, a mental organization, unparalleled in any other people."

In this respect also, I may remark, the history of Greek medicine corresponds to the history of the other great elements of Greek civilization—her religion—her poetry—her eloquence—her art—her institutions and polity. The great and various aggregate of her civilization was her own work,—self-originated and self-developed—underived, unstimulated, uninfluenced from without. The immortal song of Homer was no echo of ante-Homeric times—it was the first, fresh utterance, spontaneous and irrepressible of the young, heroic heart of Greece; the institutions of Solon and Lycurgus had no archetypes in the past; the temples of Pæstum were no copies of old originals; the gods of Ida and Olympus were no wanderers from Assyria, or Palestine, or Egypt; Apollo was born in Delos, and Aphrodite arose from the foam of the Egean sea.

Before proceeding to speak particularly of the individual writings of Hippocrates, it seems necessary to give a brief and general history of them, as an aggregate. What is meant then by the writings, or the works of Hippocrates? What are these writings? What is their origin, their authenticity, their history? What is the character and amount of our knowledge in relation to them? I will state in a very summary manner the answers to these questions.

The writings which have long been known under the title of the works of Hippocrates, or the Hippocratic collection, are made up by an aggregate of separate pieces, of a very miscellaneous character. These separate and diverse writings were first collected and arranged, as the works of Hippocrates, soon after the time of the opening of the great Alexandrian library, more than a hundred years after the death of Hippocrates.* They may be said to have been then first published in the authentic form in which they have come down to us.

It is the opinion of the best critics, after most elaborate and profound study, that this collection is constituted by a certain number of writings directly from the hands of Hippocrates; by some from the hands of his descendants; by some from the hands of other physicians, his cotemporaries or immediate successors; and by others whose origin is doubtful or wholly unknown. Hippocrates probably left his own writings—some of them in the form of finished and systematic treatises—some unfinished and fragmentary—some in the shape of loose notes or memoranda merely, to his son and successor, and so they remained in the family, probably till the family became extinct, at least as physicians. During all this period, and for some time later, there can be little doubt that there was no considerable multiplication of copies beyond those that were in the hands of the immediate

^{*} About 300 years B.C.

descendants of Hippocrates, and perhaps of his pupils. M. Littré thinks it probable that on the supposed extinction of the family, the writings fell into the hands of persons who were not aware of their value; that they were then sold and finally found their way into the library at Alexandria, a history that is known to be true of the library of Aristotle.

M. Littré arranges the various works which go to make up the Hippocratic collection in the following eleven categories, to wit:—

- 1. The veritable writings of Hippocrates.
- 2. The writings of Polybius.
- 3. Writings anterior to Hippocrates.
- 4. Writings, which although wanting marks of authenticity sufficiently positive to be referred to Hippocrates, still bear evidences of belonging to his school.
 - 5. Books which are collections merely of notes and extracts.
- 6. Books, by some unknown author, forming a particular series in the collection.
 - 7. Λ single treatise referred to by Λ ristotle.
- 8. Treatises posterior to Hippocrates, written near the time of Aristotle and Praxagoras.
- 9. A series of treatises, fragments, and compilations which are not cited by any critic of antiquity.
- 10. Notices of writings which are now lost, but which once made part of the Hippocratic collection.
 - 11. Apocryphal pieces.

The value and importance which have always been attached to the works of Hippocrates are sufficiently attested by the labors that have been bestowed upon them by critics and commentators. These criticisms and commentaries commenced with Herophilus at Alexandria, about 300 years B.C., and they have been continued, almost without intermission, from that day to this. The last and most elaborate of them

all are those of M. Littré, which have just been published, leaving the mine that has been so long and so laboriously worked, still unexhausted.

It is not important that I should give any detailed account of these commentators. I will content myself with a brief mention of two amongst them. One of the most celebrated and one of the earliest was Heraclides of Tarentum. He studied particularly materia medica and botany; and those physicians, he said, who wrote treatises on these subjects, without being skilled in the knowledge of simples, were like those police officers who cried in the streets a description of a fugitive slave, without ever having seen him.

The most elaborate and the most illustrious of the commentators of Hippocrates was Galen. He was a worthy disciple of the first great master, thoroughly fitted by his position and his qualities—his means of access to the great libraries of Pergamus, Alexandria and Rome—his possession of the manuscripts of his author—his boundless love and admiration of him—his vast learning—his clear sagacity—his broad common sense—his sound philosophy, and, crowning all these attributes with its consummate grace and nobleness, his deep and fine old pagan piety, for the work which he performed so well.

It is evident enough that the works constituting the Hippocratic collection, make but a portion of the medical literature of the Hippocratic epoch. By a fortunate destiny they have been saved,—

- rari nantes in gurgite vasto,-

but many others, like the thirty lost epics of legendary Greece, have been swallowed up in the abysses of the past. Our regret for these irreparable losses may well find consolation in remembering, that amongst the fragments saved from the wrecks of time, are the works of Homer and Hippocrates.

Galen mentions three editions of the collection, either complete or incomplete. But notwithstanding this, and although there were variations, more or less, in the several editions and copies, it appears there was one text that was generally recognized and copied; and that it was from this that the first printed editions were derived.

There are two copies in the Royal Library of Paris, which date back to the 10th century; I do not know whether there are any older copies in existence. There are two copies of the 12th century, one of the 13th, twenty of the 14th, one of the 15th, and thirteen of the 16th.

The first printed edition was published at Rome, by Fabius Calvus, in 1525. This was a Latin translation, directly from the Greek text. Four other editions were published in the course of the 16th century, at Bale, Venice, and Frankfort. Two editions were published in the 17th, two in the 18th, and four have been published during the present century. The last of these is that of M. Littré, with the Greek text, and a French translation, in six octavo volumes. * I suppose this is by far the most learned, elaborate, and complete edition that has ever been published.

The following are the titles of the several works now regarded as veritably and authentically from the pen of Hippocrates:—

- 1. Ancient Medicine.
- 2. Prognosis.
- 3. Aphorisms.
- 4. Epidemics, 1st and 3d Books.
- 5. Regimen in Acute Diseases.
- 6. Airs, Waters, and Places.

^{*}Two or three volumes remain to be published.

- 7. Articulations.
- 8. Fractures.
- 9. Instruments of Reduction.
- 10. Wounds of the Head.
- 11. The Oath.
- 12. The Law.

I shall give, in the next place, short notices of these works. The first work of Hippocrates, in the arrangement adopted by M. Littré, is an Essay of about twenty pages, entitled Ancient Medicine. It is an elegant little treatise—sound, logical, and comprehensive—on the philosophy of medicine. Its two leading purposes are to exhibit the true nature and foundation of medicine, and to controvert the false doctrines of the speculative philosophers, especially of Empedocles, and others of the Eleatic school. The true character of medical science, and of these à priori hypothetical systems, could hardly be more clearly and succinctly stated, more logically argued, or more happily and forcibly illustrated, than it is in this Essay. And this is the very question that still divides medical opinion—that is unsettled to-day, as it was when this Essay was written; dogmatic rationalism, on one side-simple, philosophical empiricism, on the other. Empedocles had broached the doctrine of the four elements or qualities-heat, cold, dryness, and moisture; then, having laid down this principle, as he would call it, he inferred that all diseases were occasioned by a disturbance of the natural equilibrium of these qualities, and that their cure consisted only in the restoration of this lost equilibrium, by the rational application of heat to cold, dryness to moisture, and so on. Hippocrates denied that there was any foundation for these assumptions; he said these qualities, as such, were pure fictions, and that the whole system, from beginning to end, was vicious, and made up of empty and vain hypothesis. On the contrary, he says, there can be no science or art of medicine, which does not rest on observation, the accumulated observation of past ages, and of the present.

The Essay constitutes so connected and logical a whole, that it is not easy to give any idea of it by extracts. I will content myself with copying one or two of the opening sentences:—

"All those who, by the living voice, or by writing, have essayed to treat of medicine, creating in their own minds, as the basis of their reasonings, the hypothesis of heat or of cold, of moisture or of dryness, or of any other agent they may choose, thus endeavor to simplify things, and attribute diseases and death to one or two of these agents, as to a first and a uniform cause, evidently deceive themselves in many points which they sustain; -so much the more blamable, since they deceive themselves in regard to an art that exists; which the world employs in its most important concerns, and especially honors in the persons of artists and excellent practitioners.* * * But medicine is this long time in possession of a principle and a method, which it has found; with these guides, numerous and excellent discoveries have been made, during the long course of centuries, and what is unknown will be found out, if capable men, instructed in these ancient discoveries, take them for the point of departure in their researches. But he, who rejecting and dis daining all the past, attempts other methods, and other ways, and pretends thus to have discovered something, deceives himself, and deceives others; because this is impossible, and this impossibility I shall endeavor to demonstrate by the very showing what medicine is. It will be shown by this, that nothing can be discovered, except by the true method." In regard to its literary merits, M. Littré says:-"This work, so remarkable for the rectitude of its judgment. and the depth of its thought, is not less so for the beauty and excellence of its style; its manner is worthy of its matter. Its periods, generally long, are constructed with perfect regularity, the members of the sentences balance and complete themselves in a manner as satisfactory to the ear as to the mind; the expression, full of justness and clearness, is always grave and dignified, but occasionally colored, so that we recognize a writer master of himself and of his subject,

^{*} Littré's Hippocrates, vol. i, p. 571. † Ibid, p. 573.

and restraining himself always within the limits marked out by a natural and correct taste. It is certainly a beautiful moreau of Greek literature, a finished model of scientific discussion upon the general and elevated points of medicine."*

The treatise on Airs, Waters, and Places, contains about fifty pages of Greek text. Its objects are, to point out the influence upon health, and in the production of disease, of the various exposures of cities to the sun, and to their prevailing winds; the similar influence of different kinds of water, and of the seasons and weather. The inhabitants of Europe and Asia are compared with each other, and their physical and moral characteristics are referred to differences of soil and climate, and of political institutions.

In relation to all these matters, Hippocrates gives the result of his observation, in general but quite positive and unqualified terms. He enters into no details as to the manner in which his observations were made, and gives us no evidence whatever of the correctness and reliableness of his results. It is clear enough, however, that these results are derived from no positive or adequate data, and that very many of them are altogether mistaken and fallacious. Cities, he says, exposed so and so, and supplied with such and such kinds of water, are subject to such and such diseases. A single illustration of this kind of remark will show the character of the entire Essay. "Let us suppose," he says, "a city exposed to warm southern winds, and protected from those from the north. In such a locality, the waters will be abundant, brackish, shallow, and consequently warm in summer, and cold in winter. The inhabitants will have the head moist and pituitous; the bowels will be subject to frequent derangement, occasioned by the mucus which descends from the head; the constitution will lack tone, and there

^{*} Littré's Hippocrates, vol. i, p. 565.

will be an inability to eat and drink well, for those whose heads are weak cannot bear wine; intoxication incommodes them more than it does others. As to endemic diseases, in the first place, women are more disposed to disease, and more subject to discharges; then, also, many of them are sterile, not by nature, but from ill health: abortions are frequent. Children are attacked with convulsions, and difficult breathing, accidents that are thought to produce the disease of children, i.e., epilepsy. Men are subject to dysenteries, diarrheas, long winter fevers, nocturnal emissions, hemorrhoides. As to pleurisies, peripneumonies, ardent fevers, and all those diseases that are called acute, they are not common, because such affections cannot prevail where the bowels are relaxed." The histories of the influences of water, and of the seasons, are given in exactly the same manner, and are all imbued with the same spirit.

"It is necessary," he says, "to look out for the rising of the constellations, first that of the Dog-star, then that of Arcturus, and also the setting of the Pleiades; because it is especially on those days that the issue of diseases is determined;—some are mortal—some cease, and all the rest take a new form and constitution."

In the course of this book, Hippocrates makes an explicit and unqualified avowal of his disbelief in the current superstitions of his country in regard to the supernatural cause and origin of certain diseases. In speaking of a disease amongst the Scythians, which they regarded as an infliction of the gods:—"For myself," he says, "I think this malady comes from the divinity, as all maladies do; that no one is more divine, or more human, than another; but that all are alike, and all are divine. Every disease has, like this, a natural cause, and without a natural cause, no disease is produced."*

^{*} Littré's Hippocrates, vol. ii, p. 79.

A little further on, while arguing the same point, he says, "This disease affects amongst the Scythians, not those of the worst class, but the rich—those who are most powerful by their rank and fortune. And still, if this disease is more divine than others, it ought not to be confined to the most noble and rich of the Scythians; but it ought to attack all classes equally, and more especially those who possess the least, and are unable to offer sacrifices; if it is true, that the gods are pleased with the homage of men, and recompense them with their favors. For the rich are able to immolate numerous victims, to present offerings, and to use their fortunes in honoring the gods." * Nothing can show more clearly, than these declarations, how far in advance of his age Hippocrates was, and how entirely his mind had shaken off the superstitions of his time and country. The boldness and significance of the doctrine, avowed in these few sentences, will be manifest when we remember the religious element of the Greek intellect that has already been spoken of. Although it is true that the book on airs, waters, and places, has now little or no positive scientific value, it is still a striking monument of ancient observation. It was the natural and inevitable product of the mind of Hippocrates, and of the circumstances surrounding him. No country in the world exhibits within so small an area, a greater or more striking variety of local climate, seasons, and geography, than Greece. These prominent and obvious features of the widely diverse localities—the nature of the soil—of the water—the elevation and exposure of cities—the prevailing winds—the changing seasons,—and the influence of all these upon health, and in the production of disease, would naturally attract the attention of a philosophical and observing mind. And the same remark is applicable to the striking * Littré's Hippocrates, vol. ii, p. 81.

differences between the European and Asiatic races, and their political and social institutions, which so strongly attracted the attention of Hippocrates.

The Essay on Prognosis is not quite so long as that upon Airs, Waters, and Places. As its title indicates, it is principally devoted to a consideration of the signs and symptoms which point out the probable course and termination of acute diseases. Its general method and philosophy correspond to those of the Essay on Airs, &c. It is made up of the same mixture of sagacious and acute general remark, and of loose, faulty, fallacious, and, in many instances, entirely erroneous conclusions. It opens with this pregnant sentence:-"The best physician seems to me to be he who knows how to know in advance;" and the author then goes on to point out the importance and the advantages, both to the physician and to the patient, of this kind of knowledge. "Foreseeing," he says, "and predicting those cases that will end in recovery, and those that will be fatal, the physician will be exempt from blame. In acute diseases," he goes on to say, "the physician will make the following observations:-first, he will examine the countenance of the patient, to see if the physiognomy is like that of a person in health, and especially if it preserves its own natural expression. This is its most favorable state, and the more it departs from this, the greater is the danger." Then follows that celebrated description, linked indissolubly to the name of the father of medicine, of the facies Hippocratica. "The features have attained their last degree of alteration, when the nose is pinched, the eyes sunken, the temples hollow, the ears cold and contracted, the lobes separated, the skin of the forehead dry, tense, and arid; and the skin of the whole face yellow, or black, or livid, or leaden."

Illustrative of the general character of this work, of its ex-

cellences and defects, I will make the few following extracts: -"I have made these observations upon the movements of the hands. In acute fevers, in peripneumonies, in febrile deliriums, and in head-aches, the hands, moved to and fro before the face, seeking in the void, gathering the straw of the bed into pellets, picking at the coverings, detaching objects from the walls of the room, constitute so many signs of a fatal ter-"A good respiration should be regarded as having a very great influence upon the recovery of the patient, in all acute fevers which terminate within forty days." These true and sagacious remarks may be followed by others, which, if not unintelligible, are at least very loose and indefinite. "Dropsies," he says, "which arise from acute diseases, are all dangerous; they do not deliver from the fever; they are very painful, and very fatal; most of them have their point of departure in the groin, and the lumbar region; others in the liver," and so on. "When an empyema is opened by the cautery, or by incision, the patient will recover, if the pus is pure, white, and with no bad odor; but he will perish if the pus is bloody and corrupt." * "The most fatal anginas, and those which kill most rapidly, are such as exhibit no manifest lesion of the throat or neck, and which still occasion the greatest suffering and dyspnea. These suffocate the patient, even on the first day, or the second, or third, or fourth." "He who wishes to learn to predict wisely what patients will recover, and what patients will succumb, in what cases the disease will be prolonged, and in what cases it will be short, ought to judge all things by the study of signs, and by the comparison of their several values, as they have been described. will thus judge with promptness what may be the tendency of epidemic diseases, and the constitution of the season."

The method and spirit of both these works are thoroughly

and entirely dogmatic. The conclusions, no matter how general and comprehensive they may be,—and all the details, no matter how minute and circumstantial,—are stated positively and absolutely, and with no limitations or qualifications. No point is argued or illustrated, and it is very rarely that any reasons are given for the statements that are made. The author writes always, like an absolute and autocratic master, expounding to his disciples the principles of an established and authoritative doctrine. It has been supposed, by some of the learned commentators upon Hippocrates, that the Essay on Prognosis contains a summary of the then existing medical doctrines in relation to the subject of which it treats; and is but little made up of the personal experience of the author. This is one of the assigned reasons for its magisterial and dogmatic tone.

Amongst the most valuable works of Hippocrates, are his books bearing the title of *Epidemics*. They consist of summary descriptions of the meteorological character of four several years, and of their prevailing diseases. The locality of the observations, for the first three years, is the island of Thasos, in the Ægean Sea, near the coast of Thrace, opposite to the city of Abdera. No place is assigned for the fourth year. The exact period of these histories is not known.

The meteorological description of each year begins with the autumn, and the several successive periods are marked, not by the months, but by the solstices, the equinoxes, the rising and setting of various constellations, Sirius, Arcturus, the Pleiades. This is followed by a history of the prevailing diseases. These diseases are sketched in brief and general terms—in broad and clear outline only—but by the hand of a great master.

The value of these books is much increased, and an appearance and feeling of reality given to them, by the series of

cases that are reported, and the allusions to individual patients, that occur in the course of the several books. In the history of the third year, he is describing the causus, and he says:—"Some were seized with a jaundice on the sixth day, but they were relieved, either through the urine, or by a derangement of the bowels, or by an abundant hemorrhage, as was seen in the case of Heraclides, who lodged in the house of Aristocides." * * * "Dysenteries also prevailed during the summer, and some patients even who had hemorrhages, were attacked finally by dysenteric troubles; this is what happened to the slave of Eraton, and to Myllus." Amongst the many notable things in the first book, I must make room for the following:—

"In diseases we derive diagnostic signs from the following considerations: from the general human constitution, and from each individual complexion; from the disease, the patient, the medical prescriptions; from the physician who prescribes, for that may suggest cither hopes or fears; from the general constitution of the atmosphere, and the peculiarities of the weather of each country; from the habits, the alimentary regimen, the mode of life, the age, the conversation, the silence, the thoughts which occupy the patient, the sleep or want of it; the dreams; the motions of the parts; itchings; tears; the nature of the exacerbations; the stools; the urine; the expectoration; vomitings; changes which occur in discases, and deposits which either endanger the loss of the patient, or promote a favorable result; sweats; coldnesses; chills; cough; sneezings; hiccups; respiration; eructations; flatulence, noisy or not; hemorrhages; hemorrhoids. It is necessary to know how to study all these signs, and to understand what they import."

I have already alluded to the short histories of individual cases appended to the books of epidemics. There are forty-two of these histories, twenty-five cases ending fatally, and seventeen in recovery. Ineed not say to you how exceedingly interesting and valuable these histories are. They are the

earliest recorded cases of disease, and of its treatment. They give us clear and authentic glimpses into the every-day life of that old Grecian world; we open the door and go into the sick chamber; we stand by the bed-side of the patient; we know his name and occupation; the house and the street in which he lives; we know that Hippocrates is his physician; we witness his examinations; we follow the changes in the symptoms from one day to another, till the case has terminated in death or recovery.

M. Littré in closing his introduction to the first and third books upon Epidemics, says-"It is possible, at the point where we now are, to form to ourselves an adequate notion of the state of medicine and of medical education, as they were conceived by Hippocrates, and the school of his ancestors. The first thing was to learn to know diseases; this instruction was given on a plan, the theory of which is contained in the Prognostics, and the practical realization in the Epidemics. The young practitioner, already familiar with the phenomena of crises and coction, with the succession of symptoms, with the favorable and unfavorable indications, with the characters denoting the state of the forces of the patient, found himself in a position equivalent to that of a student of the present day, who has been prepared by clinical study to make a correct diagnosis. The next step is the treatment. This has a double end-first, to husband the forces of the patient, so as to aid him in his struggle with disease; and second, the administration of medicine. The physician was taught to fulfil the first of these indications, by instruction relating to the subject, or by the treatise on regimen in acute diseases, and similar works; to fulfil the second indication, he was taught in books, very imperfect fragments only of which have come down to us. If to this is added an extensive knowledge of hygiene, and an

imperfect acquaintance with anatomy, we see what the knowledge was, of a physician of the school of Cos, and how it was acquired. But it must not be forgotten, judging from the works that remain to us of the Hippocratic collection, that these physicians had received a profound philosophical education; they were familiar with the philosophical doctrines of their times, and with the habit of generalization. In this picture of solid and various learning we recognize also those features in which they have been drawn by Plato, their contemporary: we recognize those men accustomed to meditation—who said that medicine sought out the nature of the subject that it studied, the cause of whatever it did, and that it knew how to render a reason for all these things; -of those physicians, who in the explanations they gave to their patients elevated themselves to the heights of philosophy; finally, of those Asclepiades, of elegant and cultivated intellects, whom Plato places on a level with the other distinguished men of the brilliant Athens."*

The Treatise on Regimen in Acute Diseases is one of the most interesting of the works of Hippocrates. Apart from its value as the first formal exposition of a most important doctrine of practical medicine, it sheds incidentally, more than most of the writings of Hippocrates, no little curious light upon the condition of ancient medicine.

The treatise opens with a criticism on the doctrines and practice of the Cnidian physicians; and this criticism, with a few commentaries of Galen, constitutes all that is left to us of this oldest medical polemic; and all our knowledge also of a work published by the physicians of Cnidus, called the *Cnidian Sentences*. Cnidus and Cos were the seats of the rival schools, and as has sometimes happened, since the days

^{*} Littré's Hippocrates, vol. ii, p. 591.

of the Olympiads, they taught diverse and opposite doctrines. The Cnidians made a great number of separate diseases; they sought to divide diseases into all their individual species; and to this end, their descriptions of symptoms were more minute and detailed than those of Hippocrates. They aimed at nice specific nosological distinctions. Hippocrates regarded these distinctions as unimportant, and insists especially upon the necessity of studying the general condition of the patient. He reproaches the physicians of Cnidus with neglecting the latter study.

Tried by the standard of their own age, Hippocrates was in the right and his rivals were in the wrong. Essential to all positive science as accurate specific diagnosis is, the means for attaining it did not exist at that early period; anatomy and pathology were almost entirely unknown, and the specific distinctions made by the Cnidians were undoubtedly, for the most part, wholly fanciful and illusory. The point most strongly and most properly insisted upon by Hippocrates is what I have elsewhere called therapeutical diagnosis, instead of nosological or specific diagnosis. Great skill and sagacity in the former is often attained, even at the present day, by physicians who may be wanting in the knowledge and ability essential to the latter.

In the second place, Hippocrates refuses his assent to the practice of the Cnidians, because they limit themselves to so small a number of remedies; excepting in acute diseases, prescribing only purgatives, milk whey, and milk.

The leading principles of the treatise are these two: first, that it is necessary to be especially cautious in regard to the diet of patients, at the height or acme of diseases, since at that period all alimentation augments the disease; second, that the law of habit renders all sudden changes injurious;

therefore it should be with great caution that the change should be made from abstinence to alimentation.

The leading article in the diet of acute diseases amongst the ancient Greeks was barley. "The decoction of barley," says Hippocrates, "seems to me to have been judiciously chosen; I praise them who made this choice, for the mucilage which it contains is demulcent, homogeneous, agreeable, limpid; it has a sufficient humidity, it allays thirst, it facilitates the alvine evacuations, it is not astringent, it occasions no serious disturbance of digestion, it does not distend the stomach." Minute directions are then given for the use of the decoction, and of simple barley water. The following directions are given for the removal of pain in the side: "At first, it will be well to make use of fomentations. The most powerful of these is hot water, contained in a leather bottle, or bladder, or a vessel of brass, or earthenware. Some soft substance should be interposed, so that its contact may not be painful. It is well also to apply a large soft sponge, soaked with hot water; the fomentation should be covered with a cloth; in this way, the heat will be contained for a longer time, and the vapor will not be inhaled by the patient, unless this inhalation of warm vapor is of some utility, which is sometimes the case. You may also take barley, put it in vinegar water, a little more acid than is proper for drinking; boil the mixture, sew it in a sack, and apply it to the side; coarse bran may be used in the same way. For dry embrocations, the best is salt put into woolen bags." "If the pain declares itself towards the clavicle, or a weight is felt in the arm, or around the nipple, or above the diaphragm, it is necessary to open the inner vein at the bend of the elbow, and not to hesitate in taking a large quantity of blood,-until this fluid flows of a much deeper red, or instead of being bright and red it takes a deeper

color, for both these things may happen." Amongst the many striking remarks to be found in this treatise is the following:-"I do not see, furthermore, that physicians know how to distinguish in diseases, the different kinds of debility, one from the other, according as they depend upon emptiness of the vessels, or some debilitating irritation, or some suffering, or the acuteness of the disease, or the diverse affections depending upon temperament and constitution; and still, ignorance or knowledge of these things may result in the death or safety of the patient. Without doubt, in a case of weakness, the result of pain, or acute disease, it would be more injurious to give drinks, ptisans, and aliment freely, on the supposition of the debility being dependent on emptiness of the vessels; but it is shameful also not to know when a patient is feeble from inanition, and to aggravate his condition by a low diet. This last error is not without some danger, although less than the first; but it is much more ridiculous." The remaining articles, the use of which is methodically and minutely discussed, are wine, hydromel, water, and oxymel. Most of these practical precepts are marked by great good sense; they are such as might still be, as indeed many of them still are, followed.

The spirit and manner of the *Treatise on Regimen* are quite unlike those of the *Prognostics*, and of the *Airs and Waters*. The former is much more argumentative, and less dogmatical than the latter; it is more philosophical, more qualified; it abounds in illustrations, and analogies. The reasons assigned for these differences by M. Littré are the following: the treatises on *Airs*, *Waters*, &c., and on *Prognosis*, were intended as formal and authoritative expositions of established doctrines; they took, of course, a dogmatic and magisterial form. The treatise on regimen was written for the purpose of recommending and vindicating doctrines and practices in

some degree novel;—at any rate not generally recognized and admitted. "The ancients," says Hippocrates, in this treatise, "have not written anything important upon the regimen of patients; and this is a grave omission." This treatise naturally took the argumentative and illustrative form, which characterizes it.

There is a collection of notes and memoranda, published by M. Littré, as an Appendix to the treatise on regimen. If not positively written by Hippocrates, they are at least Hippocratic. They are quite miscellaneous in their character, and unconnected with each other. Amongst many other things more or less noteworthy, are the following: -"Peripneumonic and pleuritic affections should be examined in the following manner. If the fever is acute; if there is pain in one side of the chest, or in both; if the patient suffers during expiration; if he coughs; if the sputa are rusty, or livid, or thin, and frothy, or blood-red, or if they differ in any way from healthy sputa, it is necessary to act as follows:the pain extending upwards towards the clavicle, or towards the nipple, and the arm, the inner vein of the arm of the affected side should be opened. The quantity of blood drawn should be in proportion to the constitution of the body, the season, the age, and the color, and if the pain is acute, the bleeding should be pushed boldly to faintness; then an injection should be given." Amongst the favorite remedies of Hippocrates, repeatedly spoken of in this Appendix, are warm oily embrocations.

In the course of this Appendix, there occur a considerable number of formal directions for the treatment of individual diseases. The two following may be taken as specimens:—
"In the dry cholera, the abdomen is distended with flatus, and there are borborygmi, and pain in the sides and back. The bowels are costive. It is necessary to be careful, while

preventing vomiting, to procure alvine evacuations. The patient should have a warm oily enema,—with the most abundant oily embrocations; he should be placed in a bathing tub, and warm water should be slowly poured over him. If, thus warmed, he has alvine evacuations, he is cured. It is good for him, also, to sleep, and to drink dry old wine, without water; give him oil to quiet him, and to procure evacuations. He should abstain from bread: but if the pain is not relieved, give him goat's milk for drink, till the bowels are opened. If there is diarrhea, with bilious discharges, colicky pains, vomiting, and a sense of suffocation and biting, the best treatment is rest, oxymel for drink, and to prevent vomiting."*

"For an empyema, take slices of squill, and boil them in water; when they are well boiled, pour off the water, add more, and boil again till they begin to be soft; then wash them well, and mix with them roasted cumin (cuminum cyminum, L.) white sesame (sesamum orientale L.), and fresh almonds; rub all these substances with honey; make them into a pectoral that you will give to the patient. He will take with it light wine. For diet, pound a lekiskeon of white poppy—moisten it with water in which meal has been washed; boil, and add honey; let the patient take it warm through the day." †

Amongst the most celebrated of the works of Hippocrates, are the *Aphorisms*. These, as the term indicates, are short, sententious, dogmatic statements, relating to almost every portion of practical medicine. They differ very widely one from another. Many of them are the result of careful and extensive observations, true to-day as when they were written; others are partially correct, and others, still, are

^{*}Littré's Hippocrates, vol. ii, p. 496. † Ibid, vol. ii, p. 579.

entirely erroneous and fanciful. Their prevailing vice is their absoluteness, and want of qualification.

It is impossible to give any summary or analysis of them, and I can only cite a few of them in order to illustrate their character, and the differences among them.

They open with the well known sentence:—"Life is short; art is long; opportunity is fugitive; experience is deceptive; judgment is difficult."

"When the disease is at its height, the most severe diet should be rigorously enforced."

"Drinks and diets not quite so good, but agreeable, should be preferred to those that are more disagreeable."

"Those who are subject to frequent and grave syncopes, without

any manifest cause, will die suddenly."

"All diseases originate in every season; but certain diseases originate more frequently, and are more severe, in some seasons than in others."

"Being without fever, with anorexy, heartburn, cloudy vertigo, and bitterness of the mouth, indicates the necessity of an emetic."

"If during the course of a fever, a sudden suffocation occurs, without tumefaction of the neck, the case will be fatal."

"Those who are attacked with tetanus die in four days: if they go beyond this period, they recover."

"In those who spit frothy blood, the blood comes from the lungs."

The Aphorisms relating to pregnant women, are, for the most part, fanciful and absurd; for instance:—

"In the case of a pregnant woman with twins, if one of the breasts diminishes, she will abort of one feetus; if it is the right breast, of a male: if the left, of a female."

A large portion of the third and fourth volumes of M. Littré's edition, is taken up with the essays on Wounds of the Head; the Physician's Office or Study; Fractures, and Articulations. The short book on the office or surgery of the physician is almost entirely a treatise on dressings, and especially the bandage. It will be seen from the titles of the

subjects just enumerated, that they are wholly surgical. I do not propose to give any account or analysis of these papers. The strongest general impression their study leaves upon the mind of a modern reader, is that of the extent, elaborateness, and completeness of Hippocratic surgery, in relation to the subjects treated of in these essays.

The descriptions of the various kinds of fractures, the directions for the application of apparatus—of bandages—compresses—splints—adhesive straps, and so on—of extension and counter-extension—are hardly less detailed, particular, and minute, than those of a modern work on surgery.

In fracture of the femur, the capital point, says Hippocrates, is that the extension shall be sufficient; for it is very injurious and shameful, he adds, that the limb should be shortened; and if the patient is to be unskillfully treated, it would be better, he continues, that both femurs should be broken, and then the patient would preserve his equilibrium.

Great stress was laid by the Hippocratic surgeons upon manual skill and dexterity; and this "surgical gymnastics," as M. Littré terms it, was methodically and assiduously taught and cultivated. "It is necessary," says Hippocrates in the Surgery, "to accustom one's self to the use of either hand, and of both, at the same time,—having for rules, utility, suitableness, promptness, dexterity, elegance, and facility." * * "In the application of a bandage, the conditions to be fulfilled are promptitude and dexterity, which prevent pain,—ease, and elegance. Promptness is in the manipulations; to spare pain is to act with facility; to have ease is to be ready for everything; to have elegance is to be agreeable to the sight. It has already been stated by what exercises these qualities may be acquired." * * "Applied, and in place, a bandage ought to be useful, and of good

aspect; this will be the case, if the pieces are smooth, and without wrinkles, and if the turns are regular; this regularity exists, when for smooth and uniform surfaces the bandage is smooth and uniform; and when, for roughness and irregular parts, it is also rough and irregular."

M. Littré thus sums up the more common surgical operations performed in the time of Hippocrates: "They reduced fractures and luxations; they applied the apparatus necessary to retain the displaced parts; they resected the ends of projecting bones in compound fractures; they trepanned the bones of the cranium, and the ribs even, to evacuate fluids accumulated in the chest; they opened abscesses of the kidneys and the liver; they performed the operation of paracentesis of the chest and of the abdomen; they operated for fistula in ano, and for hemorrhoids; they cauterized the shoulder to prevent the disposition to recur of certain scapulo-humoral luxations; they adjusted club feet; they sounded the bladder; they amputated the dead portion of gangrenous limbs; they rasped the bones of the cranium; they extracted the dead fœtus from the nterus." *

One of the curious facts in connection with the treatise on Articulations, is that of a warm controversy between Hippocrates and several of his contemporaries, in relation to dislocations of the thigh. Ctesias, of Cnidus, physician to the court of Persia, and principally known by some historical fragments, blames Hippocrates for reducing, at all, the dislocated femur, since it could not be kept in place. Hegetor accused him of not understanding the anatomy of the hip joint.

It seems that the office—the *latrum*—of the old Greek physicians, was quite an extensive establishment. "These," says Galen, "were large houses, with large doors, admitting

^{*} Littré's Hippocrates, vol. iv, p. 617.

freely the light."* It was furnished with a great variety of surgical instruments and apparatus, machines for the reduction of dislocations, and so on; and it was, at the same time, the drug shop and pharmacy.†

The famous *Oath* of Hippocrates is so short, and so full of interest, that I copy it entire:—

"I swear by Apollo, physician; by Esculapius, by Hygica and Panacea; by all the gods, and all the goddesses,—taking them to witness,-that I will fulfill with my strength and my eapaeity, this oath and engagement:-I will place my master in medicine in the same rank with the authors of my life; I will share with him my fortune, and in necessity I will provide for his wants; I will regard his sons as brothers; and if they desire to learn medicine, I will teach it to them without pay. I will communicate my precepts, my oral lessons, and all other instruction, to my sons, to the sons of my master, and to those disciples who are bound by an engagement and an oath, according to the medical law, but to no others. I will direet the regimen of my patients, for their advantage, to the best of my ability and my judgment; I will abstain from all wrong, and all injustice. I will not furnish poison to any one who solicits it, neither will I make a suggestion of it to any one; neither will I furnish to any woman an abortive. I will pass my life, and I will exereise my art, in innocency and purity. I will not perform the operation of lithotomy, but will leave it to those who oeeupy themselves with it. Into whatever house I enter, it shall be for the good of my patients, keeping myself from all corrupting conduct, and especially from the seduction of women and boys-free, or slaves. Whatever I see or hear in society, in the exercise, and even not in the exercise of my profession, I will keep secret, if it is not necessary to divulge it, regarding discretion as a duty in all such eases. If I fulfill this oath, without violation, may it be given to me to enjoy happily life and my profession, honored forever among men; if I violate it, and perjure myself, let the opposite fate be my lot."

It is a memorable and a beautiful circumstance, that we find making part of the oldest authentic records of our art,

^{*} Littré's Hip., vol. iii, p. 265.

this summary of the highest and purest ethics of our profession. This oath was the sacred formula, at the baptism of our infant art, when the consecrated water was sprinkled upon its forehead, and it was set apart for its divine mission. We cannot estimate or measure the good that it must have accomplished. Through the long lapse of many centuries, in every land and age of civilization and of learning, in all languages, and under all religions, it has been the tutelary genius of our art, its guide and its ægis, its pillar of cloud and of fire. How many a time, amidst trial and temptation, when the syrens of passion and of pleasure have breathed their seductive whispers into the ear of the hesitating listener,when Fame, and Power, and Fortune have urged their perilous suggestions to the weak and struggling spirit; how many a time has the tried and the tempted fled for strength and for succor to this, his early vow of consecration, and washed his hands anew in the innocency of its lustral water, and nerved his heart afresh for its struggle after the right and the true!

It has often seemed to me a matter of regret, that this old usage should not have been continued. There is danger, I think, in this intensely practical and utilitarian age, that we may undervalue the influence and importance of these moral sanctions—of these appeals to our higher nature. The study and the practice of our art stand in need, both of them, of all the elevating and ennobling influences that can be brought to act upon them. And this formal and religious recognition of his duties, by the young physician, would be as appropriate and becoming, as it would be salutary and preservative in its influences. If our art is not strictly divine, it has duties and relations that are sacred,—there is something sacerdotal in its offices and character, and it would be well for the young physician that his assumption of its responsibilities and obligations should be attended,

like the consecration of the ancient priesthood, with the pomp of solemn and significant ceremonial;—that holy garments, "for glory and for beauty," should be put upon him,—the ephod, and the robe, and the breast-plate,—that he should be anointed with the consecrated oil,—and amid the perfume of sweet spices—of censers burning with "stacte, and onycha, and galbanum, and pure frankincense," he should be sanctified and set apart to his great ministry to humanity.

Not much longer than the Oath, is a singular little paper, called the Law. I give it, also, entire.

- "1. Medicine is, of all professions, the most noble; and yet, through the ignorance of those who practice it, and of those who judge it superficially, it is now degraded to the lowest rank. So false a judgment seems to me to depend principally upon this:—that, in the cities, the profession of medicine is the only one that is subjected to no restriction, or punishment, except disgrace;—now, disgrace does not wound those who live by it. These people are very much like the characters who figure in tragedies; just as these characters have the appearance, the costume, and the masques of actors, without being actors; so, among physicians, many are so, by their titles, but very few are so, in fact.
- "2. Whoever is destined to acquire sound knowledge in medicine, has need to unite in himself the following conditions:—a good natural disposition; teaching; a favorable situation; instruction from childhood; love of labor; long application. Above all things, he must have a good natural disposition. It is all in vain to attempt to force nature, but when she herself leads in the right path, then commences the teaching of the art, which the student ought to appropriate to himself by reflection; the student taken from childhood, and placed in a situation proper for instruction. It is necessary, besides, to devote a long time to study, so that instruction, striking its roots deep, may produce good and abundant fruit.
- "3. Such, in effect, as is the culture of plants, is the study of medicine. Our natural disposition is the soil; the precepts of our masters is the seed; instruction, begun from childhood, is the sowing of the seed in proper season; the place where instruction is

given is the surrounding air, where the plants find their nourishment; diligent study is the hand of the workman; finally, time

strengthens, and brings all to maturity.

"4. Such, then, are the conditions essential to the learning of medicine; such is the profound knowledge, necessary to be acquired, if one wishes, in going from city to city, to be reputed not only a physician by name, but also a physician in reality. Ignorance is a poor possession,—a poor capital for those who earry it along with them, night and day; a stranger to confidence, and contentment, it nourishes timidity and temerity;—timidity, which shows power-lessness—temerity, which shows inexperience. There are, in effect, two things,—to know—and to think that you know; to know, is science—to think that you know, is ignorance.

"5. But sacred things should be revealed only to the sacred; it is forbidden to communicate them to the profanc, as long as they

have not been initiated into the mysteries of science." *

M. Littré's fifth and sixth volumes contain several of the remaining portions of the writings constituting the Hippocratic Collection. What these writings are has already been stated. Some of them are equal in interest and value to the best of the authentic works of Hippocrates. This is the case, especially, with the remaining five books of the Epidemics. I will make brief mention of a few of the other writings. There is a short, but very methodical and logical essay upon Art, the object of which is to controvert the opinions of those who deny the claims of medicine, as an art, and who allege that when patients are cured, it is by fortune, and not by medicine. There is a short essay on the Nature of Man, the objects of which are to controvert the hypothetical notions of the philosophers, in regard to the composition of the human body, and to vindicate the doctrine of the four humors. The book on Maladies is made up of various generalities in relation to disease, and most of it is marked by great good sense. It contains a very elaborate contrast between skillfulness and

^{*} Littré's Hip., vol. iv, p. 639.

unskillfulness in the practice of medicine. "It is unskillful,' the writer says, "the disease being one thing, to say it is an other; if it is grave, to say it is light; if it is light, to say it is grave; not to predict truly that a patient will or will not recover; not to recognize an empyema; when a serious disease is preying upon the system, not to discover it; when there is need of a certain remedy, not to know it; not to promise to cure the curable, and to promise to cure the incurable. In all this, it is the intelligence that is at fault; in the following, it is the hand: to overlook the presence of pus in a wound or a tumor; not to recognize fractures and luxations; not to discover, in rasping the cranium, whether the bones are fractured; not to succeed, when sounding a patient, in penetrating the bladder; not to recognize a stone in the bladder; not to perceive, in practicing succussion, the existence of an empyema; in practicing an incision, or a cauterization, to err in not making them large or deep enough, or too large and too deep; -all that is unskillful; but this is skillful: to know diseases; what they are; whence they originate; whether they are long, short, mortal, or not; subject to changes; increasing, diminishing, grave, light; to bring to a favorable issue in the treatment whatever is possible; to distinguish cases that are not curable; to know why they are not, and to procure for the patients every amelioration compatible with their affections."* The book with the title Affections, is a very good treatise, intended for persons out of the profession, on popular medicine and hygiene. The essay on the Sacred Disease, or epilepsy, is remarkable for two points of doctrine, that are stated with great clearness, and argued with much ability. The first of these doctrines is, that this disease is not a sacred or divine disease; that it is no more supernatural in

^{*} Littré's Hip., vol. vi, p. 152.

its character and origin than other diseases. The second is, that the brain is the organ of the intellectual and moral faculties. "It is necessary to know," says the author, "that pleasures and joys, laughings and sports, on the one side, and chagrins, sufferings, discontents, and complaints, on the other, come to us only through the medium of the brain. It is by the brain, especially, that we think, comprehend, see, understand; that we know the ugly from the beautiful; the bad from the good; the agreeable from the disagreeable. * * * It is also through the brain that we are idiots,—that we are crazy,—that apprehensions and terrors beset us;" and so on. There are two books on Wounds and Fistulæ, which, as their titles indicate, are surgical. The long essay on Regimen, and the chapter on Dreams, are, to a great extent, fanciful and hypothetical.

The study of a subject, like that which has occupied us this evening, is, to a mind at all thoughtful or philosophical, pregnant with many suggestions. I am turning over the closing page of my Essay,—the last sands of our allotted hour have already run out, and I have no time to dwell upon these suggestions. I will ask your indulgence only while I give expression to a single thought, with which, more appropriately than with any other, my Discourse may be closed.

The science of medicine is, historically, twenty-two centuries old. Since its origin in Greece, four hundred years before the Christian era, it has never ceased to be cultivated, wherever any considerable degree of civilization has been reached. During all this long period, the science of medicine, like its kindred sciences of observation, has obeyed its own inherent and vital law of development. Subject always to its various and complicated relations; sometimes seduced or driven from its true path; sometimes obstructed or hindered in its march; sometimes dragged backward, it has still

steadily struggled onward, obedient to the living principle of growth and progress within it. It has experienced the same vicissitudes; it has encountered the same obstacles and hindrances; it has achieved the same triumphs, as its sister sciences,—as astronomy, meteorology, geology, and chemistry; and the like common destiny of glory and beneficence awaits it and them.

It is natural enough, when we look at the popular medical delusions of our day, and the skepticism as to the claims of medical science and art, which has seized upon the minds even of sensible and cultivated men,-that we should have some misgivings as to the permanency and stability of this science and art. But the great organic laws of nature are not to be suspended, nor reversed, nor turned aside. The lessons of twenty-two centuries are not to be forgotten, nor made to contradict themselves, for the first time, to-day. The science is constituted by the results of the toilsome and conscientious study of nature during these long centuries, recorded, systematized, and arranged; and as long as nature remains what it was two thousand years ago, and what it is to-day, these results will remain. The art is the practical application of the science; it has been the chief minister to sick and suffering humanity, in all ages, and amongst all civilized people; it is so to-day,—it will be so to-morrow. What has been will continue to be. The laws, ordained at the beginning, will still rule over us. The sun that shone upon Athens, and upon Pericles, shines still upon us; and it will continue to shine upon all who are to come after us. sometimes pass over its surface, but they do pass, and they neither dim nor darken the radiance of its disc. Clouds and mists may intercept, for a season, its beams; but it is only for a season; and the Hand that hung it in the heavens, will still maintain it there, to bless the future, as it has blessed the past, with its kindly and beneficent light.





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