THE HENRY.

On the 21st of August, 1893, there assembled in Chicago an International Congress of Electricians, the transactions of which, while largely technical and scientific in their character, were in all respects important, and in some respects of great interest to the intelligent American public.

The organization of the Congress and preparations for holding it in connection with the World's Columbian Exposition were well under way before the conception, or at least the publication, of the scheme for a series of so-called "World's Congresses," the proceedings of which were brought prominently to the attention of the reading public during the past summer. The American Institute of Electrical Engineers was probably the first body to take action in reference to an Electrical Congress. Cordial coöperation existed between it and the Exposition authorities, and a large and representative advisory committee, embracing nearly all of the leading American electricians, together with many of the first rank from foreign countries, was organized, with Dr. Elisha Gray, of Chicago, as chairman.

It is not intended, in this article, to give an account of the Congress and its doings, but to refer to its organization and personnel only so far as is necessary to throw light upon the full intent and meaning of a single sentence in its Proceedings.

The number of representatives of foreign governments present was unexpectedly large, and the delegates were of the highest character. To one who has some familiarity with the literature of electricity it will suffice to mention the names of Von Helmholtz, Mascart, Preece, Rowland, Silvanus Thompson, Ferraris, Ayrton, and Hospitalier, among the many who took part in the deliberations of the Congress. The honorary president was Dr. H. von Helmholtz, whose splendid contributions to science cover so wide a field that he would have been easily first in congresses devoted to the consideration of several departments of human knowledge quite distinct and apart from that of electricity.

In its internal constitution the Congress differed in some particulars from all others held in Chicago, and a part of its work had more of an official and international character than that of any other. This was the consideration and official sanction of names and values of units of electrical measure.

Notwithstanding the fact that more than a hundred million dollars are invested in machines and instruments for the production and consumption of electricity and in their manufacture, little legislation has been had looking to the protection of producer and consumer through accurate measurement, as has long been recognized to be imperatively necessary in other commercial transactions. It is true that the science of electrical measurement has been thoroughly explored; excellent methods and instruments have been devised and constructed, and the most perfect system of units of measure ever conceived has been developed during the past quarter of a century. These units, being continually in use among scientific men, had come to be recognized as in some degree authoritative among those engaged in commercial applications of electricity. But in general no legal values were attached to these units, and in reference to two or three of them scientific men were not yet in entire accord in their nomenclature and definition. One or two electrical congresses, notably that at Paris in 1881, had previously considered these questions, and a tentative agreement upon some of the points at issue had been reached; but not much was accomplished that was satisfactory and lasting, except that an incentive was created for further and more accurate investigation of the values of certain physical constants in doubt. The results of these investigations, and the general progress of the science of electricity during the past decade, were such as to justify the belief that the time had now arrived when an international agreement could be reached upon definitive values of the units desirable and necessary in electrical measurement, as well as upon the names they should bear. To this end it was desirable that the consideration of such important questions should be restricted to a smaller, more deliberative body than the general congress of electricians, the membership of which reached several hundred. It was therefore agreed to create what was technically known as the Chamber of Delegates, which, as its name implies, consisted of specially commissioned delegates from the several countries represented.

In this Chamber the United States, Great Britain, France, and Germany were allowed five delegates each. Some other nations were allowed three, others two, and some only one.

The members bore commissions from their respective governments, and twenty-six were actually in attendance, representing nine different nations. The four great nations named above had full delegations, some others were only partly represented, and two or three nations had appointed delegates who failed to reach Chicago in time for the meeting of the Congress. The Chamber met in regular session every day during the week of the International Congress, with Professor Rowland, of Johns Hopkins University, as its presiding officer. At the end it had unanimously agreed upon names and definitions for eight units of electrical measure, all that are thought to be necessary or desirable at the present time, and no more are likely to receive consideration for some years to come. The Chamber passed a resolution recommending the official and authoritative adoption of these units by the several nations represented in the Congress. They are all primarily derived from the fundamental units of length, mass, and time of the metric system, and are thus interrelated in the simplest possible manner.

As already stated, it is not the purpose of this article to discuss the conclusions reached by the Chamber of Delegates from a scientific standpoint, but it will be desirable to name the units selected, and explain in a general way their technical significance. In the order of their adoption by the Chamber they are as follows: the ohm, the ampere, the volt, the coulomb, the farad, the joule, the watt, the henry.

These names are derived from those of distinguished scientific men, all worthy of a place in the front rank of modern physicists, and many of whom have made signal contributions to the advancement of the science of electricity and electrical measurement.

The *ohm* is the unit of resistance. It has been applied by common consent for many years to one of the three most important characteristics of a circuit conveying a current of electricity. Its use perpetuates the fame of the author of a simple and beautiful law by which these three fundamental elements are bound together.

G. S. Ohm was born in Bavaria in 1781, and educated at the University of Erlangen. In 1827 he published a pamphlet, The Galvanic Circuit Investigated Mathematically, containing what has since been universally known as "Ohm's law," and which has had a most important and far-reaching influence on the development of the theory and applications of electricity. Guided by Fourier's classic investigation of the flow of heat in conductors, Ohm, from purely theoretical considerations, arrived at the conclusion that, in any circuit through which an electric current was made to pass, the strength of the current — that is, the quantity of electricity passing a given section of a conductor in one second of time — was directly proportional to the electro-motive force (often called the "electrical pressure"), and inversely proportional to its resistance. The importance of Ohm's investigations was not recognized at the time of their publication. Had the full meaning of his conclusions been understood by those who shortly afterward engaged in the development of the electro-magnetic telegraph, they would have been guided to results which were reached only after much loss of time and money, and many vexatious and discouraging disappointments. In 1825, Barlow, in England, had declared the impossibility of the telegraph, owing to the difficulty of sending electric currents through long wires. It was noted that the strength of the current diminished greatly when the length of the conductor was increased, and this was properly assumed to be due to the greater *resistance* offered to the passage of the current by the increased length. Barlow suggested that this could be overcome only by enlarging the dimensions of the conductor, and that when a current was transmitted through any considerable distance the diameter of the wire must be enormous. For this reason, the electro-magnetic telegraph was an impracticable scheme. This apparently conclusive argument undoubtedly seriously delayed the progress of invention along that line. But, curiously enough, about the time Ohm in Europe was publishing a theoretical investigation which might have furnished the key to the solution of the problem, in America a young man, not yet thirty years of age, named Joseph Henry, had begun a series of experimental researches at Albany, New York, which did make the way entirely clear a few years later. Henry attacked the difficulty both as to cause and effect. The effect was that when the conductor through which the current was passing was increased greatly in length, the strength of the current was so reduced that it was insufficient to operate the apparatus necessary for the reproduction of the signal at the receiving end. To meet this difficulty he investigated electro-magnets, and so improved upon the original device of Sturgeon that comparatively feeble currents were capable of producing mechanical effects through long wires. He also originated the ingenious device known as a "relay," by means of which a local battery is put in operation by a main current of little strength, thus making local effects independent of the strength of the main line currents. By his invention of the "intensity magnet" and use of the "intensity battery" he made the electro-magnetic telegraph possible, and in 1831 he transmitted signals through a mile of wire, causing a bell to ring by the action of an electro-magnet. Out of this has grown the astounding network of wires, overhead, underground, and across the seas, by which the earth is girdled, and the existence of which has wrought more change in the treatment of social, political, and commercial problems than any other single fact of the present century. While many of the conclusions which Henry had experimentally reached were in harmony with and might have been deduced from Ohm's law, to Ohm belongs the credit of having first clearly pointed out the real and exact meaning of "resistance," and its relation to the other conditions of the circuit. The bestowal of his name upon the unit by which it is measured is a fitting recognition of the lasting value of his discovery.

The *ampere* is the unit of current. André Marie Ampère, born at Lyons, France, in 1775, must be regarded as the creator of the science of electrodynamics. In 1820, Oersted, the Dane, published his magnificent discovery of the effect of an electric current upon a freely suspended magnet, thus establishing the relation between magnetism and electricity which many of the ablest philosophers had sought in vain for years. Ampère first heard of what was called the "Copenhagen experiment" on September 20, 1820. On the 18th of the same month he presented to the French Academy a paper in which he announced the fundamental principle of the science of electro-dynamics, together with a number of capital experiments in extension of Oersted's principle. In the incredibly short time of a single week he had gone all over Oersted's work, experimentally and theoretically; he had devised a new and ingenious hypothesis, for the examination of which he had invented novel forms of apparatus, and by means of which he had brought the whole subject within the domain of mathematical treatment. The history of the science of electricity shows nothing more brilliant than the work of that memorable week. To him who was first to show the action and reaction of currents upon each other, and at the same time furnish a rational and most useful hypothesis upon which the now rapidly growing theory of electro-magnetism might be constructed, has long been freely accorded the high praise which is implied in calling the unit of current measure an ampere.

The beautifully simple law of Ohm, to which reference has already been made, and which is as omnipresent and omnipotent in electricity as is Newton's law of gravitation in astronomy and mechanics, is administered by and through a triumvirate. Two of the triad, namely, resistance and current, are presented above. The third, which is mathematically the product of these two, is the electro-motive force in the circuit, and its unit of measure is the *volt*. The appropriateness of this name will be at once recognized when the services of the distinguished Italian philosopher, Volta, the contemporary of Galvani, are remembered. In his early youth Volta was considered dull, and he showed little promise of future distinction. His first awakening to intellectual activity manifested itself in a tendency to compose poetry, but from this he turned to experimental science; and when Galvani, in 1786, saw in the twitchings of the legs of a frog the beginning of a series of marvelous discoveries which have made the nineteenth century greater than any that have gone before, Volta was in the prime of life, thoroughly equipped by taste and experience to take up the subject at a point where his countryman seemed likely to leave it, and so enlarge and enrich it as almost to make it entirely his own.

Differing from Galvani as to the cause of what was long called "galvanism," he originated what is known as the "contact theory," and was the first to have clear ideas of what is now termed "electro-motive force." His theory led him to the construction of the voltaic pile or battery, which has been of incalculable value in the development of the science of electricity and its applications. It happens that the unit of measure, one volt, is very nearly the electro-motive force of one cell of Volta's battery, being a little less than that of an ordinary sulphate of copper ("bluestone") cell.

These, the ohm, the ampere, and the volt, are the three fundamental units of electrical measurement. They are related to one another through Ohm's law, and, as other units are largely derived from them, it will be useful to illustrate this relation before proceeding further. For this purpose, perhaps nothing is better than the well-known and oft-repeated comparison of the flow of a current of electricity in a conductor to the flow of a stream of water through a pipe. When water flows from a reservoir through a pipe, the quantity which passes any point in the pipe in one second (current strength) depends on the height of the reservoir above the outlet, — that is, on the "head" or pressure under which it flows, — and also on the resistance which the pipe offers to its motion. The greater the pressure the greater the flow, and the greater the resistance the less the flow. The strength of the current is, therefore, directly proportional to the pressure, and inversely proportional to the resistance. If, in this statement, "electro-motive force" be substituted for "pressure," it becomes Ohm's law. When these elements are measured in the units given above, the electro-motive force in volts, the resistance in ohms, and the current in amperes, the law is expressed very simply by saying that the "current is equal to the electro-motive force divided by the resistance."

Thus, if the electro-motive force be one volt, and the resistance of the circuit be one ohm, the current will be one ampere. In an ordinary incandescent electric lamp, the electro-motive force may be about one hundred and ten volts, the resistance of the carbon filament when hot about one hundred and seventy-five ohms, and the current must therefore be about six tenths of an ampere.

The unit of quantity is the *coulomb.* Charles Augustus Coulomb was a French engineer who made important contributions to science during the latter half of the last century. His character is well shown by the fact that he submitted to imprisonment rather than make a favorable report upon a proposed system of canals which he examined as a royal commissioner, and which he could not approve. His ingenious invention, the torsion balance, enabled him to measure exceedingly small forces with an accuracy hitherto unknown in science; and by its use he made many brilliant researches in electricity, the first in which exact measurement played an important part. A coulomb is the quantity of electricity transferred by a current of one ampere in one second.

The unit of capacity is the *farad.* The name of Faraday might with propriety have attached to more than one unit of electrical measure. His remarkable career, as a newsboy, a bookbinder's apprentice, an intensely interested listener to the lectures of Sir Humphry Davy, Davy's helper, later his assistant, and finally his successor at the head of the Royal Institution in London, is so generally known that reference to it is hardly necessary. In the history of electricity, three splendid discoveries stand incomparably above all others. With the first the names of Galvani and Volta are associated, in the discovery of the new electricity and the means of generating it. In the second, Oersted and Ampère united in laying the foundation of the science of electro-magnetism. The third was the discovery of "induction," in which Faraday and Joseph Henry made possible the marvelous development of the last two decades.

But every branch of the subject was enriched by Faraday, and among his most brilliant investigations are those relating to the "capacity of condensers," and especially the influence of the dielectric.

If an insulated conductor is charged with electricity, the quantity which exists upon it will depend on the potential and the capacity of the conductor. It is exactly as if one spoke of the quantity of water in a lake or pond as depending on the depth (pressure, or "potential") and the area of the bottom (capacity). If two conductors are near each other, but separated by a comparatively thin layer of air, glass, shellac, or other dielectric, the "capacity" of the combination is much greater than that of either of the conductors, and it is known as a "condenser." The well-known Leyden jar is a common type. In speaking of the "potential" to which a condenser is charged, the word is used very much in the same sense as "electro-motive force" in what has gone before. Potential, therefore, may be, and constantly is, expressed in volts. The unit of capacity, the farad, is the capacity of a condenser which is charged to a potential of one volt by one coulomb of electricity.

To continue the analogy already used, the unit of capacity (area of bottom) for vessels holding water might be defined as that which would require unit depth to hold unit quantity.

The *joule* is the unit of work. The name of James Prescott Joule will forever be associated with the most splendid generalization of the present age, namely, the principle of the conservation of energy. Through his interest in electro-magnetism, and especially by his investigation of the efficiency of electric motors, he was led to the consideration of the correlation of the various forces of nature, and associated with Professor William Thomson, now Lord Kelvin, he executed a remarkable series of experiments affording cumulative proof of the indestructibility of energy. With great appropriateness his name has been given to the unit of work. It is related directly and simply to the "erg," which is the unit of work of the centimetre-gramme-second system. Reference has already been made to the fact that when a current of electricity is passed through a conductor heat is generated, the amount depending on the resistance of the conductor and the strength of the current. This heat is the equivalent of the energy electrically expended. The joule is the energy expended in one second by a current of one ampere passing through a resistance of one ohm. In the common incandescent or glow lamp, the energy expended as heat in the carbon filament is about 63 joules in every second.

In addition to the unit of work, it is also extremely desirable to have a unit of *rate* of work, or, as it has been called by many writers, "activity," but which is more commonly expressed by the word "power." It is only natural that the name of one who was the first to recognize the necessity for a quantitative evaluation of the rate at which energy was absorbed, and to give numerical expression to it in the definition of the *horse power*, should be given to the new unit. The *watt* is also simply related to the centimetre-gramme-second unit of power, and is defined as work done at the rate of one joule per second. The rate of expenditure of energy in the glow lamp already quoted would be 63 watts. One horse power is equal to about 746 watts. When Watt came to Glasgow, he was prevented from securing work as a mathematical-instrument maker by the action of the trades-unions of that time. Fortunately, the door of the great university was opened to him, and there, in the capacity of maker and repairer of instruments and apparatus, his genius received its first encouragement and development. Although by education and training rather a practical than a scientific man, he possessed the true scientific insight to an unusual degree, and is eminently worthy of the associates among whom he is here placed.

The foregoing somewhat lengthy and detailed account of the history and origin of seven of the eight units of electrical measure recently adopted by the International Congress has been thought desirable, if not necessary, to a full understanding of their relation, historically and otherwise, to the eighth and last, the name of which is the title of this article.

Most Americans are more or less familiar with the name and fame of Joseph Henry. To many he is known, however, only as the first secretary of the Smithsonian Institution. Giving a broad and liberal interpretation to the somewhat vague language of the will of its founder, Henry moulded the institution, while it was yet plastic and without traditions, into the form in which it has since essentially existed. He directed its energies into channels very different from those that would have been selected by one whose horizon was narrower than his, and, by steadfastly adhering to his own splendid conception of its functions as an instrument "for the increase and diffusion of knowledge among men," he made of it an organization which is, and must perpetually be, a benefit and a blessing to all mankind. Others, a smaller number, think of him as the youthful professor of mathematics and natural philosophy in the Albany Academy, where, in spite of the seven solid hours of teaching each day required of him, he found time to begin the series of researches in electro-magnetism which in later years were to make him famous. Here, and at the College of New Jersey at Princeton, to which he was shortly transferred, he is seen pursuing these researches with that clearness of vision which characterized his work along all lines, and with an extraordinary fruitfulness which goes only with great intellectual activity accompanied by unflinching honesty of purpose. For fourteen years at Princeton, where he discharged the duties of professor of natural philosophy with signal success, he continued his original investigations, which, while touching many of the more important branches of physical science, were in general related to his favorite subjects, electricity and magnetism. At the end of this period, when at the very highest development of his powers, he was transferred to that larger field of activity and usefulness which was offered by the new institution at Washington, to enter which he knowingly, and against the wishes of many of his friends, abandoned the practically assured prospect of lasting fame as one of the three or four most distinguished physicists of the present century. During these years the work was done which justifies and demands the recognition accorded to it in bestowing upon Henry the high honor of a place in the galaxy of famous physicists whose names will be perpetuated in the metrological nomenclature of all modern languages. In much of this work he was running on lines parallel to those followed by an English philosopher who is doubtless justly entitled to be considered as the first experimental physicist of the present age. Although older by several years than Henry, Faraday began his series of memorable investigations in electricity about the time Henry presented his first papers on the same subject before the Albany Institute, a local scientific society of which he was a member. From this time forward they were often "treading upon each other's heels." In the early thirties great scientific discoveries were not announced in all parts of the world within twenty-four hours of their making, as is done to-day, thanks to the labor of these same two philosophers, who, sixty years ago, owing to infrequent communication across the sea and scanty means of publication on either side, were often ignorant of an important advance for some years after it had been made. Henry's innate modesty made him slow to recognize, at least to acknowledge, the value of what he did, and there is no doubt that he lost much in the way of general recognition by his failure to bring the results of his investigations promptly to the attention of the scientific public. Indeed, it was sometimes the urgency of his friends, more jealous than himself of his scientific reputation, that secured the tardy publication of important papers. At that date, far removed both in space and time from the centre of scientific activity, he often contended with the discouraging yet natural and almost necessary fact that some of his finest work had been anticipated by those who had the start of him in time, and the advantage in facilities and resources.

On August 30, 1831, Faraday made his splendid discovery of electro-magnetic induction. Before this time Henry had investigated the conditions necessary to the production of a strong magnetic field, and had constructed by far the most powerful magnet known up to that day. Ignorant of Faraday's work, he planned and began in August, 1831, a series of experiments with a still more powerful magnet, having in view the discovery of a *method of producing electricity from magnetism* which Faraday was then on the eve of making. But, as already stated, his duties in the Academy were exacting, and, being interrupted, he was prevented from returning to the subject for nearly a year. In the mean time news of Faraday's discovery had crossed the ocean, a meagre account of his results having reached Henry some time early in the summer of 1832. He at once took up the subject, and by the aid of his powerful apparatus was enabled to produce striking verifications and extensions of Faraday's conclusions. A description of these experiments was published in Silliman's American Journal of Science for July, 1832, and the article contains the first announcement of a most important discovery, in which he anticipated Faraday by several years. "Ik Marvel" wrote a sentence in Dream Life, which has been an inspiration to many a young man, "There is no genius in life like the genius of energy and industry;" and if the genius is to develop in the direction of experimental science he might well have added, "and the genius of attention to apparently unimportant, accidental phenomena." It was this trait that was so highly developed in his character, this anxious solicitude that nothing, however trivial it might at the time seem, should escape without note, that brought to Henry the honor of the discovery of *self-induction.*

Faraday had found that when a current of electricity through one circuit was started, or stopped, or altered in strength, a current would be induced in a neighboring circuit; but the induction of a part of the circuit upon another part, or self-induction, had escaped him. Henry saw it in the interesting and previously unobserved fact that if the poles of a battery of no very great power be connected by a long wire, and the circuit be suddenly broken, a spark will be produced at the point of interruption, while if the connecting wire be short a spark will not be produced. He also noted that the effect was increased by coiling the wire into a helix, and he remarked, at the close of the article describing these experiments, "I can account for these phenomena only by supposing the long wire to become charged with electricity, which, by its *reaction on itself,* projects a spark when the connection is broken."[1]

This was a capital observation, but, although published in 1832, it was apparently unknown to Faraday, who rediscovered the fact a few years later, and announced it as new. As a matter of fact, it appears that Faraday did not himself observe the fundamental phenomenon, but that his attention was called to it by a friend. His announcement was made in the Philosophical Magazine in 1834, and in a communication to the Royal Society in 1835 he extended and enlarged upon the observation.

In much that he had done, however, he had been anticipated by Henry, who, although greatly interrupted in his original investigations by his removal from Albany to Princeton, had himself taken up the phenomenon of self-induction and made an interesting research.

As time and opportunity allowed Henry continued his electrical investigations during the years that followed. He was the first to obtain induction from induced currents, and he made a classic investigation of mutual induction, and of currents of the second, third, fourth, and higher orders. In addition to his discovery of self-induction, his researches

[1] There is good reason for believing that Henry had observed this phenomenon at a much earlier date than that of publication, and that the observation was really made before the discovery of induction by Faraday.

on the inductive effects of transient currents, on magnetic screening, and especially on the oscillations of the electric discharge were on new lines and of the highest order. The investigation of the oscillations of an electric discharge, one of the most important of all, was almost unrecognized until nearly a half century had elapsed. It was published in the Proceedings of the American Philosophical Society in 1842. In it he says, "The phenomena require us to admit *the existence of a principal discharge in one direction, and then several reflex actions, backward and forward, each more feeble than the preceding, until the equilibrium is obtained.*"

Two years later Helmholtz wrote, "We assume that the discharge is not a simple motion of the electricity in one direction, but a backward and forward motion between the coatings, in oscillation, which become continually smaller, until the entire *vis viva* is destroyed by the sum of the resistances;" and in 1853 Professor W. Thomson published in the Philosophical Magazine a mathematical investigation of Transient Electric Currents, developing an equation in which "the whole theory is packed up." Concerning the influence of Henry's discoveries on the marvelous progress of electricity during the past five or ten years, it may be well to rest upon the opinion of one of England's leading electricians, who, in the preface to a recent volume on one of the latest phases of electrical development, writes as follows: —

"At the head of this long line of illustrious investigators stand preëminent the names of Faraday and Henry. On the foundation stones of truth laid down by them all subsequent builders have been content to rest. The Experimental Researches of the one have been the guide of the experimentalist no less than the instructor of the student, since their orderly and detailed statements, alike of triumphant discovery and of suggestive failure, make them independent of any commentator. The Scientific Writings of Henry deserve hardly less careful study, for in them we have not only the lucid explanations of the discoverer, but the suggestions and ideas of a most profound and inventive mind, and which indicate that Henry had early touched levels of discovery only just recently becoming fully worked."[1]

That one whose work is so highly esteemed should have been selected for honor in the International Chamber of Delegates is not surprising. It was also eminently fitting that his name should be given to the unit of induction.

As already intimated, the strength of the induced current depends on the rapidity with which that of the inducing current is altered. The sudden stopping of a current must be regarded as decrease at a very rapid rate, and the starting of a current as increase at a rapid rate. It is during the most rapid changes in the strength of the inducing current that the strength of the induced current is greatest, and when a current is once established and flowing at a uniform rate no induction takes place. The unit of induction, the *henry*, is the induction in a circuit when the electro-motive force induced is one volt, while the inducing current varies at the rate of one ampere per second.

It was gratifying to the American delegates in the Chamber at Chicago that the motion to adopt "henry" as the name of this unit came from Professor Mascart, the distinguished leader of the French delegation, for among the French, some years ago, another name, the "quadrant" or "quad," had been proposed, and since that time much used; that it was seconded by one of the leading delegates from England, Professor Ayrton, who had himself, a few years ago, proposed the word "sec-ohm" as

[1] Fleming, The Alternate Current Transformer in Theory and Practice, vol. i., London, 1889.

being a proper name for the unit of induction, a proposition which for a time found much favor; and finally, that it received the unanimous approval of the entire Chamber, thus furnishing a testimonial of the highest order of the estimation in which the work of Joseph Henry is held, and a recognition of his rank as a natural philosopher which some of his own countrymen had been somewhat tardy to appreciate and acknowledge.

T. C. Mendenhall.

ACHILLES IN ORCUS.

From thy translucent waves, great Thetis, rise!
Mother divine, hear, and take back the gift
Thou gavest me of valor and renown,
And then seek Zeus, but not with loosened zone
For dalliance; entreat him to restore
Me, Achilles, to the earth, to the black earth,
The nourisher of men, not these pale shades,
Whose shapes have learned the presage of thy doom;
They flit between me and the wind-swept plain
Of Troy, the banners over Ilion's walls,
The zenith of my prowess, and my fate.
Give me again the breath of life, not death.
Would I could tarry in the timbered tent,
As when I wept Patroclus, when, by night,
Old Priam crept, kissing my knees with tears
For Hector's corse, the hero I laid low.
My panoply was like the gleam of fire
When in the dust I dragged him at my wheels,
My heart was iron, — he despoiled my friend.
Cast on these borders of eternal gloom,
Now comes Odysseus with his wandering crew;
He pours libations in the deep-dug trench,
While airy forms in multitudes press near,
And listen to the echoes of my praise.
His consolation vain, he hails me, "Prince!"
Vain is his speech: "No man before thy time,
Achilles, lived more honored; here thou art
Supreme, the ruler in these dread abodes."
Speak not so easily to me of death,
Great Odysseus! Rather would I be
The meanest hind, and bring the bleating lambs
From down the grassy hills, or with a goad
To prod the hungry swine in beechen woods,
Than over the departed to bear sway,
Then from the clouds to note the warning cry
Of the harsh crane; to see the Pleiades rise,
The vine and fig-tree shoot, the olive bud;