Interesting Facts About Freemasonry

The Grand Lodge of Free and Accepted Masons of the State of Michigan
Acknowledgment ...
of our grateful appreciation
to The Grand Lodge of Iowa
and its Committee on Masonic Education
for permission to use their material
in the preparation of this booklet,
is hereby sincerely expressed.

THE GRAND LODGE COMMITTEE ON SERVICE AND EDUCATION

(1961)
Interesting Facts About Freemasonry

Freemasonry has its lodges in every city in the United States, and in almost every town and village. It has them on the desert, through the mountains, in the wilderness, and among what Isaiah described as "the isles of the sea." It has them in Canada, Mexico, Central America, South America, Great Britain, Europe, Africa, the Near East, India, Burma, Indo-China, Malaya, the Philippines, East Indies, New Zealand, and Australia; it had them in many other countries of the Old World until certain religious and political ideologies forbade their existence.

Not one of them was ever organized as the result of any Masonic missionary enterprise, because Freemasonry has no such enterprise; or for the purpose of making money, or as the result of a bargain with the political and ecclesiastical ruling powers. Each lodge came into existence of itself, and because a few Masons desired to have it so.
Freemasonry has spread over the earth as gradually, as silently, and as naturally as the light of dawn. So also has it moved down the long roads of time. There were lodges a thousand years ago. Long before that date, and as far back as the Ancient World, there had been other organizations, called gilds and collegia, so similar to Masonic lodges that historians are unable to tell where one left off and the other began. Few things still existing in the world are as old as Freemasonry.

During the long period from the time of Charlemagne (about 800) until the Reformation any man engaged in the building crafts was called a mason, and of these were many kinds including quarriers, dike builders, wallers, paviors, tilers, and all who could build cottages or barns. Among them all there was a special class of builders who could both design and construct monumental and public buildings such as cathedrals, chapels, churches, mansions, borough halls, etc. These latter were called Freemasons. The name had much the same meaning then that architect has now.

When one of the great public buildings was undertaken, Freemasons were called in from all
parts of the kingdom and often from foreign countries. As soon as a sufficient number had signed the rolls, their first step was to erect a building of their own, called the lodge; their next step was to construct cottages for themselves and their families. Each day, all the workmen received instructions in their lodge room.

Because these Freemasons came from so many different places, and even from other countries, they could not have a permanent local organization of their own, as other craftsmen did; instead, they had what we should now call a society, or a fraternity. There was no single ruler of it; it had no one capital; the members were held together by their general observance of a few rules, regulations, and customs. Modern Freemasonry, such as is practiced in lodges across America, is the direct descendant of that early fraternity.

In those days almost every man admitted to a lodge was a craftsman who made Freemasonry his means of livelihood; such men nowadays are called Operative Masons. As time passed, however, lodges here and there began to admit into membership a few men who did not follow
Freemasonry as a means of livelihood, but were attracted to it for other reasons, and largely because of its antiquity and its fellowship; such were called "Accepted" Masons; and also were called "Speculative" Masons, a name which always had meant an understanding of the ideas and principles of Freemasonry. It is for such historical reasons that members of the Fraternity today are called Free & Accepted Masons.

By 1700 the number of Speculative (or Accepted) members had become so preponderant in most of the lodges in Britain that when the first Grand Lodge of the world was set up in London, England, in 1717, the whole Fraternity ceased to draw any distinction between Operatives and Speculatives; any man, otherwise qualified, and regardless of his means of livelihood, could become a Mason. That has been true ever since.

The history of Freemasonry therefore falls into three periods. In the first period all Freemasons, with very few exceptions, were Operatives, by which is meant that they made architecture their means of livelihood. In the second period the membership of the lodges was a mixture of Operatives and Speculatives. In the
third period, beginning in 1717, it has been wholly Speculative. The one principle which unites the three periods is the fact that throughout its history Freemasonry has always been a fraternity - a fraternity, nothing more, nothing less, and nothing other.

The form of Freemasonry which thus descended directly from the Operative lodges of a thousand or so years ago is known as Ancient Craft Freemasonry; it is organized in Grand Lodges and local lodges. During the last quarter of the eighteenth century a number of branches grew out of that parent trunk, and in the course of time each one developed an independent form of organization of its own. Each of these appendant bodies is called a Rite.

In the United States there are four such appendant Rites in addition to Ancient Craft Freemasonry. The Cryptic Rite is organized in the form of a General Grand Council, a Grand Council for each of the larger number of states, and local councils. The Capitular Rite, which is better known as the Royal Arch, is organized in the form of a General Grand Chapter, a Grand Chapter for each of the larger number of states, and local chapters. Knight Templar-
ism is organized in the form of a Grand Encampment for the nation, a Grand Commandery for each of the larger number of states, and local commanderies. The Ancient & Accepted Scottish Rite has a system of four local bodies which are under the general government of two Supreme Councils. One of these, called the Southern jurisdiction, has in it the states west of the Mississippi River and south of the Ohio River. The other, called the Northern jurisdiction, has in it the states east of the Mississippi and north of the Ohio.

Thus, that which is sometimes called the American System of Freemasonry consists of five Rites, each of which is separately organized, enacts its own laws, has its own officers, and its own treasuries. A man may join one of these other four Rites, or all of them together, but to do so he must be, and continue to be, a member in good standing of an Ancient Craft lodge, and in each instance must pay the fees and dues of another Rite after he has been elected to its membership, in addition to his lodge dues.

Alongside the five Rites which comprise Freemasonry properly so called are a number of
Side Orders, each of which also is independently organized. Among them are such as the Order of the Eastern Star, the Ancient Arabic Order Nobles of the Mystic Shrine, the Grotto, etc.

Upon the organization of the first Grand Lodge in London, 1717, Freemasonry, as already stated, became a fraternity wholly Speculative. In 1723 that Grand Lodge published a volume of laws, rules, and regulations called the Book of Constitutions which made it clear that a Mason must believe in God but that he was also free to belong to any religion or church of his choice consistent with such a belief. The paragraph in which that provision was made is probably the most influential and famous single piece of writing in the whole literature and history of the Fraternity:

"A Mason is oblig'd, by his Tenure, to obey the moral Law; and if he rightly understands the Art, he will never be a stupid Atheist, nor an irreligious Libertine. But though in ancient times Masons were charg'd in every Country to be of the religion of that Country or Nation, whatever it was, yet 'tis now thought more expedient only to
oblige them to that Religion in which all Men agree, leaving their particular opinions to themselves; that is, to be good men and true, or Men of Honour and Honesty, by whatever Denomination or Persuasions they may be distinguish'd; whereby Masonry becomes the Center of Union, and the means of conciliating true friendship among persons that must have remain'd at a perpetual Distance."

Since Freemasonry is a Fraternity, all matters of theology, creeds, doctrines, and ecclesiastical organizations lie outside its province, so that it never pronounces upon any of them or takes sides with one against the other. In its lodges around the world are men of many religions, and as Rudyard Kipling wrote in one of his most famous Masonic poems, men of many religions may sit down together in the same lodge. Freemasonry makes war on no church, nor does it champion any church, and if some church should chance to make war on it, it would let it pass by and would not retaliate. In all the Landmarks, Constitutions, general laws, rules and regulations of all the regular
and duly constituted Grand Lodges is no mention of any church. A member of any Ancient Craft Lodge who might seek to introduce religious controversy into his lodge would stand in danger of being immediately suspended or expelled.

The people of the Middle Ages were confronted by a very difficult problem, as far as skilled work was concerned. On the one hand, there were no public schools, no printed books, no scientific manuals, no trade schools, and no factories in which things could be made by machinery. On the other hand, almost all of the trades and crafts called for highly specialized skill; many of them used raw materials dangerous to handle. In processing those materials they often employed chemicals, fire, etc., hazardous if not understood. Their tools oftentimes were tricky, dangerous, and only an expert could make them or keep them in condition. An untrained man might finally produce something but it was not safe to use because it might turn out to be poisonous, or go to pieces, or fall down.

A workman had to be educated and trained and yet there were no schools or books; how
to do it? The people of the Middle Ages solved the problem by organizing all men each craft, trade, art, or profession into gilds. Each gild had a complete monopoly of its own kind of work. It had local organizations but these observed general rules and practices common to them all. To enter any one of the crafts, to become a carpenter, weaver, leather worker, carver, pharmacist, etc., etc., a youth had to enter a gild as an apprentice without pay, and thereafter prove himself willing to be trained and educated by his master and other master workmen; and he was not permitted to become free to work for himself until after that long apprenticeship, and the apprenticeship itself was not declared ended until he could successfully meet a test to prove his skill.

Freemasons had more reason for demanding a long and rigorous apprenticeship than other crafts because their work was especially hazardous. Stone itself was dangerous to manage not only because it was a large mass with much dead weight but also because when being worked, chips and splinters might go a long distance on all sides. If an arch or pillar was not perfectly constructed it might collapse. The workmen
themselves oftentimes were on top of walls, or high up in a tower, or perched on an arch, or wooden scaffoldings. Their tools were many, and frequently were complex, or difficult to use. And the erection of such a building as a cathedral required many kinds of arts and skills.

Because it was for these and many other similar reasons dangerous for an unskilled man to work, the crafts insisted that their own members should keep their own skills, arts, and processes strictly to themselves. These were called "trade secrets," and a gild member could be expelled for betraying them.

Freemasonry had its own "trade secrets." It also had in common with the other crafts another form of secrecy which grew out of trade secrets. This may be described as privacy. Since the trade secrets were confined to members only, none but members were permitted to belong to their organizations, to have a vote or a voice, or to hold office, or to sit in their meetings. What went on was necessarily private to the members if the trade secrets were to be preserved.

Modern society is full of private circles. A
family is one. A club is one. The members of such a circle enjoy among themselves a form of social fellowship which has been knit together because the members of the circle are intimately acquainted and associated in some activity. The local members of a gild were similarly knit together. They and their families might live together in the same quarter of a town, and they were all associated closely, over long years, in their social affairs as much as in their work. A stranger who might intrude was not welcome because he could so easily disrupt the filaments which bound the members and their families together. This was social privacy.

The Freemasonic lodges of the present day have the same reasons for secrecy, although the form of it, and the details, may differ much from five hundred or a thousand years ago. Such lodges employ many rites, symbols, emblems, and signs, none of them intelligible to any man who has not been initiated, and educated and trained in their meanings. Nearly all non-Masons who undertake to interpret such things end up with notions wildly absurd. Freemasons have much which they must hold in privacy, and for obvious reasons; and they have
much among themselves, much that can be described only as a private circle.

By a secret society is meant an organization of men which seeks to keep its own existence dark, which refuses to divulge the names of its members, or its meeting places, or its purposes. It is an underground organization. If this be a correct definition of "secret society" Freemasonry is almost the exact opposite. It does not conceal its existence, but meets in rooms or buildings of its own, which are in the center of cities and towns. It makes no secret of its membership, because those members may walk openly along a public street to a church service, a funeral, or to some such public ceremony as the laying of a corner stone. Each year every Grand Lodge publishes a printed volume of its proceedings. As for the ideals and purposes of Freemasonry, they have been openly stated in more than 200,000 printed books during the past two centuries. There is nothing dark or malign in those secrets; on the contrary they are nearly all secrets of training and teaching, and therefore are secrets of light.

One of the corollaries of that secrecy is that which Freemasons know as non-solicitation.
During the long period of Operative Freemasonry it could never have occurred to any Master Mason to go about among parents with eligible sons to petition them to have those sons pray for admittance to the Masonic Craft. Such a youth had to come of his own free will and accord; he had to have his father or guardian behind him; and he had to have a certain number of qualifications.

Today, after all these centuries, the same rule applies. A petitioner now must be at least twenty-one years of age; he must not permit any man, Mason or otherwise, to talk him into petitioning for the Degrees. The whole matter is one for him himself to choose and decide. Freemasonry supports no propaganda; it carries on no missionary enterprise; it has no salesmen; it offers no inducement.

In the early periods of the Craft when a bishop somewhere decided to erect a cathedral he would begin by organizing what was called a "foundation," and once this was done his next step was to secure pledges for a sufficient amount of money. After these funds were in sight, the Foundation selected a Master Mason to act as
superintendent, and he in turn sent out word for craftsmen and set a scale of wages.

From that time until this, Freemasons have never been mealy-mouthed about money; they have always believed in it; and the whole subject is one of the major themes in the rituals of lodges of Ancient Craft Freemasonry at this time, and comes under the head of "the wages of a Master Mason."

If a man were to object to this on the ground that modern Freemasonry is devoted to idealistic purposes and therefore should leave money out of its philosophy, he would not know whereof he speaks. There is no necessary contradiction between things material and things idealistic. The food which a man places before his family, the roof over their heads, the clothing which he furnishes, and the medicines which he purchases when they are ill, all these are material things, as money is, but they prove that he is possessed of love and affection, which in themselves are not material things.

For such reasons there is no contradiction between this philosophy of wages that Freemasonry teaches and the fact that it itself pays
no wages to anybody except to one or two lodge or Grand Lodge officers who must devote the whole of their days to the Craft. A Mason may devote the spare time of his life to his lodge, and yet never receive any pay for his time. He is never paid for being a Mason, or for being a lodge officer, or for his work on lodge and Grand Lodge Committees; and he will be fortunate if after many years of service he is not out of pocket for the years he has served. Freemasonry attracts men to it as a magnet attracts metal filings. There is much talk about the "mystery of Freemasonry," especially by non-Masons, but the greatest mystery of all is this hold which it has on its own members.

If a non-Mason were to walk into a lodge room for the first time, and when it was not in use, he would find it to be distinctive because each and every detail of its fittings and its ornaments are designed exclusively for Masonic purposes, but at the same time he would see instantly that it is a very simple room, almost a bare one. There are no secret passages in it, no hidden stairs, no caves of darkness, none of the abracadabra which goes with occultism,
magic, or mystery-mongering, and could not be because Freemasonry has no similarity to mystery-mongering nor any connection with any of its forms. The business and ritual of a lodge are plain, wholesome, homely, sane, human, and unafraid of daylight.

If the same non-Mason were to visit a regular meeting of the lodge (imagining such a thing to be possible) he might find only a small number of members present, and these would carry through certain set ceremonies and a fixed Order of Business. From this, and from the simplicity of the room, he easily could come to the conclusion that Freemasonry is not very large or exciting, that nothing much appears to be going on in it, and he might begin to wonder how it has continued for so many centuries and where could lie the secret of its wide influence.

There is a saying that "Freemasonry is largely invisible." The whole of it is never found in any one place, or in any one time, or comprised by any one thing that it does. Much of it belongs to the inner life of a member, especially to his heart and his mind. Its charities may be published or reported, but usually they are not.
When its spirit of benevolence and philanthropy makes an impress on a community it does so without proclamations or the ringing of bells. A Mason may encounter its friendship and fraternalism wherever he may be, at work or at home, and they will never be obtrusive.

The practices and teachings of the lodge may at first glance appear to be bare and of an almost childish simplicity, but each one of them, or even one of the elements of which they are composed, will, when a man works his own way into one of them, begin to open out, to grow increasingly large, until at last they seem to fill the sky; they are inexhaustible. Large books have been written about a single symbol or a single law. One Mason may make the ritual his own specialty (many do); as the years pass he will find it always enlarging itself in his mind because in it are depths beneath depths and a limitless world of meanings; in all probability no Mason in history has understood it completely or followed it out to its last horizon. Another may study the fraternity as he would study history, philosophy, theology, law in a university; there are more such students than might be believed. Another may make Masonic
law his own field; if he does he will never come to the end of it. Another may devote himself largely to Masonic charity and relief; if he does he is likely to find himself absorbed by it, and will be giving hours and days of his own time to it. Yet another may find his own forte in such of the social arts as music and entertainment, all of which are rich, wide, multifarious. Alongside of all these special activities, and keeping pace with them, has been the vast growth of Masonic literature, in which it is estimated that some 200,000 books have been published in many languages during the past two centuries, and not including Masonic newspapers and magazines.

Freemasonry therefore is a world, and not a monthly meeting, a fact signalized by the lodge room itself which symbolizes the world of mankind, and has the sky for its ceiling. Because there is thus in all strict fact and sober truth such a thing as the Masonic world it is not difficult to see why Freemasons always describe admittance into that world as initiation, a word which means "born into." A newly made Mason is one who has been "born" into the world of Freemasonry. Henceforth he is a citizen of it,
and since he is, it is impossible to describe his status in any single term, as that he has become a member, or a dues payer, or what not, because there comes a time when every member sees for himself that always there is "much more." There is literally no end to it.

A new member, once the lodge has approved his petition, makes his way into that world gradually, not all at once spectacularly or dramatically, but in three steps, each of which is sufficient to occupy his mind, usually for from two to four weeks. These steps are called degrees. A degree is an organization of ceremonies and rites, each of which is relatively independent of the others; and no man can become a member of the lodge until he has passed through the three of them. Masons themselves look upon these degrees with a certain solemn reverence; they have an inalienable dignity; and if in some one lodge anything were done to embarrass a candidate, the lodge would be in danger of having its charter removed. There is nothing whatever in them that is similar to a college hazing; still less are they similar to ordeals with which primitive folk still initiate their youth into tribal secrets.
The three degrees of Ancient Craft Freemasonry, composed as they are of ceremonies and rites, are, when taken together, that which Freemasons mean by their ritual. This ritual is almost wonderful beyond words; only a Homer or a Shakespeare could do it justice. A man who studies it until he has learned it "by heart" has a treasure for himself which literally is beyond price. More than one man has risen to eminence in American public life because he learned the art of public address through years of practice in it, or has become a great orator because the ritual taught him a golden vocabulary and initiated him into the secrets of language. If the ritual is taken solely as literature, then it stands on a par with such masterpieces Homer's Iliad, Dante's Divine Comedy, and Shakespeare's plays. If it is studied from its aspect as something for the mind to think through, it ranks with the philosophical systems of Plato and Aristotle. If any non-Mason, greatly daring, decides to petition for membership in the Masonic Fraternity he is not to expect a hazing, or any highjinks; he is to take off his shoes, he is to bow his head, and, as the Prophet Samuel said, to stand upon his feet and be a man. No Freemason now, or at any
time during the past thousand years, has ever apologized in advance to any petitioner for what he will find.

What such a petitioner will find, among other things, will be references, uttered with awe, to the G.A.O.T.U. This is not a Gypsy charm, nor a cabbalistic anagram. The letters stand for the name Great Architect of the Universe. This name itself is one used by Freemasons with all humility for the Being who is throughout the world called by the name of God. God stands in the midst of Freemasonry; therefore a petitioner need not fear lest, upon entering it, his spirit will ever be treated with indignity or assaulted by impiety.

No non-Mason who may chance to knock at the door of a lodge can have his petition received, still less voted on, unless he has first proved himself to possess certain qualifications. All the mystification which have been woven about the subject can be dispelled at a stroke, by asking a single question, which also is a simple one: Qualified for what? It is obvious that Shakespeare was qualified to write the greatest plays ever penned; but he may not have been qualified for membership in the iron
monger's gild. Albert Einstein was qualified to
discover the theory of relativity, but possibly
was not qualified for work in a factory. A lad
who is qualified to enter a liberal arts college,
may not be qualified for a school in medicine
or in law.

Qualified for what? Freemasonry's own answer
to that question is, qualified to be a Mason,
qualified to be the member of a lodge, and to
perform his duties therein.

Among the forty-nine Grand Lodges in the
United States there is a certain amount of
variation in their formulations of the qualifi-
cations required; but the differences are nearly
always in phraseology, not in substance. A
petitioner must be of lawful age; he must be
morally responsible for his own actions; ethi-
cally, he must be "under the tongue of good
report;" he must come of his own free will
and accord; physically he must at least be able
to perform the Masonic duties which will be
required of him, and have sufficient monetary
means to pay his share of expenses; and he
must be personally acceptable to the men already in
the lodge's membership, because he must be
agreeable to them since from then on he will be bound to each of them by the Mystic Tie.

A non-Mason cannot DEMAND membership but must humbly seek it. In the language of the lodge he is called a petitioner and the form which he signs is called a petition. Even if a lodge is willing to receive his petition, his status remains unchanged until the petition has been balloted on.

The petition itself, along with whatever information may accompany it, must show that the petitioner possesses the required qualifications. This is a fact of the first importance because it means that a man cannot even begin to apply for admittance into the Masonic Fraternity unless he already possesses the reputation for possessing a sound character. Freemasonry is not a reformatory. Its purpose is not to turn bad men into good men, but to make good men better. Also, it tries to make them happier, and does so by surrounding them with friends and fellows, and by opening up vistas and opportunities for many things both fine and great.

Once a man is admitted into a lodge he is not permitted to run loose in it. Freemasonry
is a CONSTITUTED fraternity. Above and behind it are the Ancient Landmarks, which neither a lodge nor a Grand Lodge can alter or ignore. A Grand Lodge itself has its own constitution. A lodge has its own installed officers, fixed orders of procedure, and tolerates no violation of peace and harmony. Nothing ever is altered to to suit the position, fame, fortune, or personal predilections of a petitioner; he must accept Freemasonry as it is, or let it alone. A lodge itself cannot come into existence unless the Masons who will compose it pledge themselves to abide by the Ancient Landmarks, the constitutions, and the general laws; it cannot decide for itself what Freemasonry is or is not, and could never do so even though its members might vote unanimously to make the attempt. It is as if Freemasonry were to say: "I am what I am. My members must accept me as I am or not at all. It would be better for me not to exist than for the members here, there, and everywhere to keep altering me to correspond with their own schemes, theories, or whims."

As a result of that which Masons know as "the principle of universality" ("a lodge is per
mitted to exist wherever it CAN") lodges are at work in remote countries. How can this be? A Korean cannot converse with an Englishman, nor could a man of Burma understand the language of a man of Michigan. From one of these countries to another there also is an unlimited variety of costumes, customs, traditions, ways of thought, and ways of life. How can lodges which must remain alike take root in the midst of such unlike conditions? What is Freemasonry translatable?

There are two large answers. One is that it consists in essence of a number of fundamentals which all mankind need, know, and understand, such as brotherliness, charity, good will, fellowship, friendship, character, and the search for the Divine.

The other is that it uses rites, symbols, and emblems. A symbol says much without saying anything, and what it says may call for thought or for exposition but does not need to be translated. The level, the square and compasses, lights, the plumb, all such are immediately understood by any normal man anywhere. Gestures, symbols, postures, emblems, signs, it would be incorrect to describe such things as a lan
guage; if they were, they would constitute as nearly a universal language as language is capable of. (To this day, white men as well as Indians can make their way across this continent from one American Indian people to another by means of sign language.)

Some years ago, Douglas Malloch, a beloved Masonic poet, began one of his lyrics with two stanzas which ever since have thrilled the blood of Freemasons.

Fine men have walked this way before

Whatever Lodge your Lodge may be,
Whoever stands before the door,
The sacred arch of Masonry Stands
where the wise, the great, the good
In their own time and place have stood.

You are not Brother just with these, Your friends and neighbors; you are kin
With Masons down the centuries; This room that now you enter in
Has felt the tread of many feet, For here all Masonry you meet.

For many generations Freemasonry has numbered among its members an accounted number
of "the wise, the great, the good," and if the Fraternity has often celebrated the famous men who have been Masons it is not because it has ever been self-conceited.

Emperors, kings, presidents, and princes have been, in the quaint language of a very old writer, "of this sodality." Frederick the Great, Garibaldi, Mazzini, Napoleon, and a number of American Presidents have been Masons, and two of the latter have been Grand Masters. George Washington was Master of his lodge at Alexandria when he was inaugurated first President in 1789. Great composers have been active members, as represented by Purcell, Mozart, Samuel Wesley, Sibelius. Books have been written to list them. They have come from all possible walks of life, statesmen, scientists, theologians, scholars, authors, poets, actors, financiers, industrialists, artists, farmers, and men of the sea. Even Artic and Antartic explorers have been drawn to it, and there is nothing to wonder at the fact that a Masonic flag was dropped on each of the Poles by the first men to fly across them in an airplane. Nor does any Mason find it a cause to wonder that Benjamin Franklin was both a Worshipful
Master and a Grand Master and published the first Masonic book (1734) ever issued in America. Masons have long since ceased to feel amazed that such men should be of "their sodality"; there is no occasion to wonder because the greatest will find Freemasonry as great as will the humblest.

The word Freemasonry has entered our language as a common noun to denote private understanding, secrecy, mystery, as in the saying that "There is a freemasonry among railway workers." (There is such a thing.) But of all the mysteries connected with that name, and to Freemasons themselves, the greatest is Freemasonry itself. It began many centuries ago. It has ridden out the storms of revolutions and uncounted wars. It has planted itself in all parts of the world. What has enabled it to do so?

If the answer to that question should be that it has had a clearer understanding and a better practice of fraternalism than any other organization in the world, a reader must not be disappointed. Fraternalism itself is as everlasting as mankind. It ranks along with religion, government, science, business, the fine arts. To
discover the heights and depths of it, its length and its breadth, and the unsearchable riches in it, is sufficient justification for any man to work in it throughout his life.