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QUEEN'S QUARTERLY.

VOL. II.

JULY, 1894-APRIL, 1895.

PUBLISHED FOR THE COMMITTEE BY
THE NEWS PUBLISHING HOUSE,
KINGSTON, CANADA.

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QUEEN'S QUARTERLY,

PUBLISHED JULY, OCTOBER, JANUARY AND APRIL,

UNDER THE AUSPICES OF ALUMNI AND FRIENDS OF QUEEN'S UNIVERSITY, KINGSTON, CANADA.

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CONGREGATIONAL PRAYER.

ADDRESS TO THE THEOLOGICAL ALUMNI OF QUEEN'S UNIVERSITY, APRIL 25TH, 1894.

AS a layman and life-long Presbyterian, I ask permission to submit some thoughts on the subject of congregational prayer. I venture to do so for the reason that it appears to me a subject which ministers and laymen alike should consider. It is a subject which cannot but be of profound interest to those whose privilege it is to conduct public worship, and obviously it concerns every man and woman in every congregation within the bounds of the Dominion.

In the Presbyterian Church we are in the habit of hearing from the pulpit only; the pew seldom finds utterance. I make bold to break through the rule established by usage and give vent to thoughts long pondered on and long unspoken. In this voice from the pew to the pulpit, not a word will be heard or thought discernible in any way wanting in the highest respect for the ministerial office.

I shall first state a proposition to which all will assent: Public worship is a divinely appointed duty, and congregational prayer is an essential part of public worship. Joint prayer is one of the principal objects designed by Christian people in coming together for the worship of God.

We are all familiar with the ordinary services, in which extem-

poraneous prayer by the minister on behalf of the congregation is the universal practice. It is not necessary to enter at any length into the origin and history of this usage. It is well known that Calvin, Knox, and other reformers, held the opinion that there should be pre-arranged forms of prayer, with provision during some part of the service for extemporaneous prayer on special occasions; that there should in fact be what may be termed a discretionary liturgy, and that while restrained by no undue strictness the minister should use the written forms.

These were the views held by the fathers of the Presbyterian Church, and their ideas were carried into practice for many years after the Reformation. It is only necessary to refer to "The Book of Common Order of the Church of Scotland," a liturgy prepared by Knox himself after the Geneva model, and commonly known as John Knox's liturgy. This prayer book was used in the Presbyterian congregations of Scotland for generations.

The first General Assembly was held in 1560. At that date Knox's liturgy was in use, and four years later, in 1564, this liturgy was formally accepted by the Church. For a period of at least 82 years—being from 1564 to 1645—the law of the Church enjoined the use of this liturgical work at the principal services each Sabbath. Indeed it does not appear that it was ever formally abolished. In the 16th and 17th centuries twenty editions of the old Presbyterian liturgy were issued from the press, of which sixteen editions were printed in Edinburgh and four in Aberdeen.

Some of the records of the Kirk sessions in the first half of the 17th century refer to the regular "reading of prayers in the morning and the evening services in the public audience of the people." At this period there was generally in each congregation, a Reader often the Parish Schoolmaster. He read regularly the prayers, the Scriptures and the psalms, the minister preaching the sermon. After the Westminster Assembly the office of the Reader gradually disappeared and the whole service was conducted by the minister.

There is abundant evidence therefore to establish that in the early days of the Church, prayers were read in the assemblies of the people, and that the people were familiar with them and assent-

ed to them as their own, is obvious from the fact that for convenience they were frequently bound up with their Bibles.

It is equally true that considerable latitude was allowed, and that during some portion of the service the minister was not tied to set forms and words; yet generally he was enjoined to use the forms prescribed.

Such was the law of the Church and the practice of Presbyterian congregations before the middle of the 17th century. At that period in the history of Scotland political exigencies arose which caused the liturgical service to fall into disuse. We all know that the aversion to forms of prayer which set in was a reaction against the efforts of Charles I. and Laud, to force upon the Scotch people, a hated episcopacy with a liturgy repugnant to them described by Macaulay as being a step taken in mere wantonness of tyranny and in criminal ignorance and more criminal contempt of public feeling" a step, which, if in its effects it produced a change in the presbyterian service, was also one of the events which led to a change of dynasty. Whatever the cause of the change, the fact that pre-arranged forms were used to a greater or less degree for the greater part of a century establishes, that set forms of prayer are in no way inconsistent with, or antagonistic to, the fundamental principles of Presbyterianism. The change from a liturgical to a non-liturgical service simply proves that Presbyterianism is characterized by great freedom and flexibility, and as the same freedom obtains to-day, I think I am warranted in saying that there is nothing in our principles to prevent us modifying or amending our present usages, should it be deemed expedient. In the first Scotch Confession (1560), it is pointed out in Article XX. that freedom and flexibility are desirable, that men's judgments are not infallible, and as human ideas may change, matters of human action may and ought to change likewise—that while "in the Church or in the house of God it becometh all things to be done decently and in order"; it is useless to pre-determine what every practice shall be in the future, or attempt to make appointments for all ages, times and places. Presbyterians do not recognize any cast iron forms and rules incompatible with reason and common sense, and they have from the first felt at liberty to institute change when cir-

cumstances so demanded. The political forces which operated in the Mother country nearly two and a half centuries ago, are non-existent in this western continent in this age. The political conditions in Canada to-day are altogether different from those which prevailed in the United Kingdom, when extemporaneous prayer was substituted for written forms, and we are free to consider, indeed it is our duty to consider, the extent to which we should adhere to present usages, or how far it may be expedient to return to the views and practices of the founders and fathers of our Church.

The historical evidence goes to show that there is nothing to require a rigid adherence to one practice or the other. In the "Scotch Confession" of 1560 no particular mode of worship is laid down as binding. With the exception of the Lord's Prayer, given us as an example, there is little we find in Scripture to prescribe whether written or unwritten prayers should be used. We are left, therefore, to consider the merits of each system and ascertain on which side the weight of advantage preponderates.

Extempore prayer pure and simple, unless by a rarely gifted person inspired by the Holy Spirit, is apt to abound in crude unpremeditated thoughts and imperfect utterances. True, it can be said, that the minister in the quietness of his study may well consider the subject of the prayer to be offered, that he may revise his thoughts and give the intended prayer more earnest and deeper reflection, that he may even carefully arrange the solemn words with which he is to approach the Throne of Grace. If the minister so prepares himself, as he undoubtedly should, his prayer practically ceases to be extemporaneous, and from his place in the pulpit he recites the thoughts and words already rehearsed in private. But, the words remain unwritten; and would it not be far better that they should be reduced to writing and placed in the hands of every person in the congregation, in order that all might join the officiating minister in the common petition addressed to the Great Author of our being?

If we feel called upon to petition Parliament are we not extremely careful to have our wants expressed in well chosen words? If a Royal Prince, a Governor-General, or other high personage, comes amongst us, whom we wish to address,

what course do we follow? Is it not customary, in anticipation of his presence, to induce a capable person, or a committee of persons, to draw up with care and deliberation the address in fitting terms? Is it not frequently the case that the text is amended, revised and re-amended so that it may accurately and properly express the views of those on whose behalf it is to be read? If we are so careful in thus arranging our words so that they shall not be wanting in order, propriety, respect, and even elegance, how much more needful is it when a body of Christian people approach the infinite Deity—the King of Kings—that they should present their deepest thoughts in words fitly chosen, and not leave all to the impulse of the moment as if speaking to frail and imperfect creatures like ourselves? Is it not above all thiugs seemly that in addressing our Heavenly Father our speech should be well ordered and give expression to our most reverential adoration, and penitential emotions.

There is another point of great importance. According to the usage of our Church the officiating minister addresses the Deity in words which up to the moment they are uttered are unknown to any single occupant of the pews. The sentiments spoken may be unexceptionable, they may be devout, they may be appropriate and edifying, or they may be the very opposite; whatever their character, the people present are simply listeners, the words spoken from the pulpit cannot be called in any correct sense the prayer of the congregation. The congregation at best can only follow the minister in prayer as they attend to him when preaching, and it would be as correct to designate the sermon, the sermon of the congregation, as to consider the ordinary prayer from the pulpit, the prayer of the congregation.

In some city Churches, anthems by the choir and sacred solos are attempted; these performances may be the most renowned musical compositions, they may be most pleasing to the musical ear, they may be edifying to all present, but they cannot be considered the praises of the congregation, especially if the words of the sacred song are withheld from the congregation until they are sung.

So good an authority as Paley, in his treatise on "Duties towards God," discusses the subject of public prayer. He says

"it (a written form of prayer) prevents the confusion of extempore prayer, in which the congregation, being ignorant of each petition before they hear it, and having little or no time to join in it after they have heard it, are confounded between their attention to the minister and to their own devotion. The devotion of the hearer is necessarily suspended until a petition be concluded; and before he can assent to it, or properly adopt it, that is, before he can address the same request to God for himself, and from himself, his attention is called off to keep pace with what succeeds. Add to this, that the mind of the hearer is held in continual expectation, and detained from its proper business, by the very novelty with which it is gratified. A congregation may be pleased and affected with the prayers and devotion of their minister without joining in them, in like manner as an audience often times are with the representations of devotion upon the stage, who, nevertheless come away without being conscious of having exercised any act of devotion themselves. *Joint* prayer, which amongst all denominations of Christians is the declared design of "coming together," is prayer in which all *join;* and not that which one alone in the congregation conceives and delivers, and of which the rest are merely hearers. This objection seems fundamental, and holds even where the minister's office is discharged with every possible advantage and accomplishment. The labouring recollection and embarrassed or tumultuous delivery, of many extempore speakers, form an additional objection to this mode of public worship; for these imperfections are very general and give great pain to the serious part of a congregation."

Dr. Isaac Watts who lived half a century after the old presbyterian liturgy, fell into disuse and who disapproved of a liturgical service, strongly recommended, whenever possible, extemporaneous prayer. In his "Guide to Prayer" he advised all "to cultivate the holy skill of speaking to God". The Gift of prayer he said "is one of the noblest and most useful in the Christian life and therefore to be sought with earnest desire and diligence". But this venerable theologian concedes that forms of prayer may be useful and in some cases necessary when ministers are unable to attain in a high degree the Divine Gift.

It is claimed by some that the principal end of extempore

prayer is to move the hearts of the congregation and that this is a purpose which no written forms however admirably composed can successfully accomplish. Granting all that can be said in this regard when some rarely gifted man gives expression in prayer to his devotional thoughts, it will readily be conceded that many of our most worthy ministers are not so gifted and it would be more desirable for them to use good written forms than to speak extemporaneously in an imperfect manner.

If we turn to another branch of public worship—the service of praise—we find a recognition of set-forms of words. Joint prayer is prayer in which all join—and so it is with praise, and from the earliest days, means have been taken to admit of all joining in the common service of praise. The psalms and paraphrases were put in verse, and in the time of our forefathers the minister "read the line," as it was termed, in order that every individual in the congregation, learned or unlearned, with or without the printed verses, might join in the sacred song. The advance of education and of printing has simplified the service of praise and rendered "reading the line" unnecessary. The verses to be sung are in the hands of all, and so the whole assembled people may thus "with understanding" join in congregational praise.

The Apostle Paul places the two acts of worship—prayer and praise—on the same plane "I will pray with the spirit, and I will pray with the understanding also; I will sing with the spirit, and I will sing with the understanding also." If we have set forms of sacred verse in psalms, paraphrases and hymns, why should we not have set forms of prayer? It would seem to be a calm common sense conclusion that a book of prayers is required for the public worship of God in the Presbyterian Church in Canada.

During a long residence, almost half a century, in my adopted country, with opportunities of attending public worship under all conditions, in all parts of the Dominion, the opinion has been forced upon me that we should have a book of prayers, and that each prayer should be known by some distinctive name or number so that the minister could readily intimate to the congregation the prayer to be used. In arranging the service for the day the minister would select such prayers as appear to him appropriate for the

occasion, and he would make known his selections to the congregation precisely as he now indicates the psalms and hymns to be sung, and the chapter and verses of the Scripture to be read. By no means do I advocate that a written liturgy should be used to the exclusion of extempore prayer. There should be no such restriction. The written forms should be used at the discretion of the minister and he should be at liberty to substitute or introduce during the service, whenever it seemed to him desirable, special prayers for special occasions.

I am unable to see any well founded objection to the mode of distinguishing the prayers by numbers. The method would undoubtedly have the advantage of simplicity, and it would enable each person present without doubt or confusion to know the prayer to be followed. In some chnrches the hymns to be sung are made known to the congregation by a tablet placed on the wall, on which the numbers of the hymns are set forth. This is a plan which might with advantage become general, and the information given on the tablet could be extended so as to comprise the whole service which the minister has arranged for the day. If, for example, a tablet containing such information as follows, were placed in full view of the congregation, each individual would be enabled to follow with ease, either audibly or inaudibly, every portion of the service in which he is expected to take part; the minister introducing, as circumstances may require, extempore prayer, notices to the congregation and other matters.

MORNING SERVICE.

Opening Prayer.....No.....
Hymn .....No.....

SCRIPTURE READING.

Psalm .....No .....
Prayer before Sermon.....No.....

SERMON.

Prayer after Sermon.....No.....
Hymn .....No.....

BENEDICTION.

Our hymns of praise are culled from every source and from every age. We have striven to collect in our books of

praise the best hymns which can be found. Should we not follow a similar course with respect to prayers? In my mind, the Book of Prayers for our Church should be a collection of solemn appeals to our Heavenly Father, expressive of our every want and pure desire. In it should be gathered the most suitable prayers of all liturgies, the prayers of devout men of all ages adapted to our worship, to which would be added the most appropriate prayers of modern Presbyterian divines, to make the collection complete.

The preceding observations have had reference to public worship in organized congregations with a minister. I may point out that a book of prayers is perhaps even more required in places where there are no settled ministers. There are many Presbyterians scattered throughout the vast regions in the North West and other outlying parts of the Dominion, remote from the services to which they have been accustomed, and who are apt for want of such aid to devotion to become estranged from the church of their fathers. There are fields unoccupied by missionaries, and there are mission stations which at times are vacant. In such places well disposed men are frequently found who, however willing the heart, are not gifted with ready utterance to lead others in Divine service. To such men in such places written prayers would be a needful help; to the small groups of people it would be an acceptable boon, and would enable them to carry out what otherwise would be neglected. It will be obvious that in all such circumstances a book of prayers, placed in the hands of a lay-reader, with instructions for its proper use, would greatly aid in maintaining social worship until the appointment of a missionary, or until the settlement increased sufficiently to admit of the regular services of a minister being obtained.

In concluding these remarks on a subject of so much importance, I appeal to the reverend and learned men whom I address, earnestly to consider the expediency of introducing some change in the service of prayer in public worship. In Canada we Presbyterians are happily placed in circumstances the very opposite of what prevailed in the 17th century in the fatherland of many of us. There is nothing to becloud our views or to influence our passions one way or the other. The prejudices which affected our

forefathers, and indeed at an earlier day some of ourselves, have mostly passed away; in Canada they have no proper place, and we are free to take the course which appears to us in this new generation most expedient. While there are men in our Church who can address God with a flow of divine eloquence to move the hearts of all who hear them, it is not to be denied that some of our most worthy ministers are unable to exercise the gift of prayer impressively. In the latter case it is felt that a book of prayer would be helpful and profitable.

As a layman I invite the ministers of our Church to give their consideration to some means by which we may obtain in our congregations a nearer approach to congregational prayer than we now possess. I ask that the men and women who gather together for Divine service in Presbyterian public assemblies be permitted to take part in the public worship of God, to a greater extent than at present.

On behalf of the pew, I make bold to raise my humble voice to the pulpit, in the earnest hope that I have not in vain called its attention to the subject.

SANDFORD FLEMING.

AN OLD CONVEYANCE.

A PAPER READ BEFORE THE HISTORICAL SOCIETY OF CANADA.

WE place before you an old deed; it is only some thirty-six inches long by some thirty broad, and yet this piece of parchment bridges the chasm that exists between the last quarter of the XVII. century and the first of the XIX. It stretches from the days when "the merrie monarch" of England, the Second Charles, flirted with Nell Gwyn, Barbara Villiers and Lucy Walters, to the time when George IV. deserted and persecuted his poor wife; it unites the period when France claimed more than half the continent, when the Iroquois were the real lords of the forest, when England had a few settlements on the Atlantic border, with that in which Britain has won what France then owned, has lost what she then possessed, and the nobility of the Redman lives but in memory and romance.

This deed is a patent from George IV to the Honorable Charles Wm. Grant, of Montreal; it is dated the 15th of July, 1823; it conveys to the gentleman just named one half of five-sevenths of Wolfe or Grand Island, with all the isles and islets thereto adjacent. On the same day, by a similar patent, the other half was granted to James Leslie and his wife Julia, Archibald Kennedy Johnson and Maria, his wife, and Miss Charlotte Langan. This deed begins by telling us that a few days prior to its date the worthy folk just mentioned had executed to his Majesty a surrender of the whole Island; and this surrender (we are told) recited that his late Majesty, Louis XIV., King of France and Navarre, had, among other things, given the said island to Robert Cavallier, Sieur de la Salle, his heirs, successors and assigns; of how La Salle had sold it and how it had passed in the lapse of years from one to another until at the beginning of this century one-half was vested in Charles W. Grant and the other in the three ladies named, as coheiresses of Patrick Langan; it also stated that the conditions on which the lands were originally granted, not having been fulfilled, the owners were liable to have their possessions forfeited, and that the tenure under which they

held, *i.e.*, on payment of seigniorial dues, rights and homage according to the custom of Paris, was repugnant to the ideas and feelings of people in Upper Canada. For these reasons the nominal owners willingly gave up all their rights in the whole island to George IV., upon the understanding that his Majesty would graciously keep two-sevenths of it in lieu of his seigniorial rights and dues and grant them the remaining five-sevenths in free and common socage. King George for once kept his word, and by the deed produced, and the other one referred to, gave to the parties named five-sevenths of Wolfe Island in free and common socage.

Now this is our text. Let us enlarge upon it. Firstly, as to the persons mentioned thereon. Such well known and common folk as George IV. and Louis XIV. we need not waste time over—there was little great or grand about either of these men, save his name; our real hero is La Salle, who was indeed cast in the mould in which Nature forms the Immortals of this world.

La Salle was born in 1643, at Rouen, of an old and wealthy family. His early training was under the Jesuits, and he left their schools with a reputation for excellent acquirements and unimpeachable morals. The cravings of a deep ambition, the hunger of an insatiable intellect, the intense longing for action and achievement, subdued in him all other passions. The old world seemed too narrow a stage on which to play the part he longed to act, so in 1666 he came to Canada. He acquired a large tract of land near Lachine and settled there. Tales of the wonders of the boundless West soon fell upon his eagerly listening ears and quickly fired his imagination. The restlessness of the new world fell upon him, and we find him in 1669 with a few chosen comrades passing within sound of the mighty roar of Niagara; onwards he wandered through virgin forests and up unknown streams until he came to the Ohio River, down its swift current he paddled to the rapids, where now is Louisville; after this for a time his movements are veiled in mystery, but apparently he was driving with unwearying stroke his birch bark canoe up the broad waters of Lake Huron, down those of Michigan, and then along the quiet stream of the Illinois River. He seems to have just missed the honor of discovering that great Father of Rivers—the mighty Mississippi.

In 1673 Count Frontenac, the Governor of New France, became impressed with the idea that much would be gained by the establishment of a fortified trading post at the foot of Lake Ontario, so as to intercept the lucrative Indian trade that was so very apt to find its way to the English and Dutch on the banks of the Hudson. Being in Quebec, the Governor despatched La Salle, at the opening of navigation, to visit the country of the Iroquois, and induce those high and mighty warriors—who happened just then to be at peace with the Frence and their allies—to meet him at the mission of the Seminary priests, called Kente, on the north shore of the Lake.* Ere leaving, La Salle sent the Governor a map which convinced him that the best site for the proposed fort was the mouth of the Katarakoui—some 20 leagues before Kente—so the mouth of the River Katarakoui was settled upon as the place of rendezvous. Frontenac and his flotilla reached Cataraqui on the 12th day of July, 1673, and the anniversary of that day is still highly honored by many in this locality. By the way, we may mention in passing that as with spelling the name of Shakespeare so with that of the old name of Kingston, one can scarcely make a mistake; besides those we have already used, the authorities give us some twenty other forms—Cahiaque, Cadaroque, Cataracoui, Cataracouy, Catarakuy, Catarakouy, Cataraky, Cataraque, Cataracto, Catarocoui, Cadaraque, Catarachqui, Kadaraghke, Kadaraghkie, Kodakagkie, Catarockque, Cadaacocrochque, Catarocoui, Cuadaraghque, Crediroqua. The spelling need not be monotonous.

We know not when La Salle first saw our beautiful bay and its protecting islands, but doubtless he was here when his chieftain arrived to attend the first great international peace convention ever held in Canada, and which he himself had been highly instrumental in assembling. A word or or two as to the place of this gathering as described by the Count himself. (We quote from the Paris Documents, vol. IX. of the Documents relating to the Colonial History of the State of New York). Our bay is called "one of the most beautiful and agreeable harbors in the world, capable of holding a hundred of the largest ships, with a mud bottom, and so sheltered from every wind that a cable is scarcely necessary for mooring. At the head of the bay is a prairie more

*This name is still preserved in that of the Bay of Quinte. (Paris Documents, p. 91.

than a league in extent, as handsome and level as any in France." Verily, with reason, the French leader thought as he looked about him on the fair prospect—fairer now than then—God had blessed his enterprise in leading him thither.

As we read of the proceedings of those days at Cataraqui, we are reminded of the political pic-nics of the present unheroic times. On the 13th the Onondagas, Mohawks, Oneidas, Cayugas and Senecas each presented an address of welcome to the French Governor, who was seeking their support and influence for his party, and each orator in turn handed to him an engrossment of the address done in wampum beads and belts. Then Frontenac gave the chiefs "taffy" in abundance, and also six fathoms of tobacco, some brandy, wine and biscuits, and to the women some prunes and raisins. During the next three days the Governor was busy pushing on the erection of the fort, and meanwhile—like a regular political campaigner of modern type—he kissed all the babies he saw, and fed them with sweets, and had evening dances on the green sward for the dusky maids and matrons. Doubtless La Salle bore himself bravely through these festivities. In one speech Frontenac promised Indians that for the future they would find at Cataraqui "all sorts of refreshments and commodities" furnished at the cheapest possible rates. His speeches were not as too many since delivered here have been—words, words, nothing but words—but every now and then they were punctuated and emphasized by gifts to the listening Redmen of guns, powder, lead and flints, overcoats, shirts, stockings and beads.

The news of the discovery of the Mississippi by Marquette and Joliet made La Salle resolve to attempt still greater things in the West. He saw how admirably Fort Frontenac was suited to serve as a base for operations in that direction; the Governor had reported to the King, and all men believed "that a person could go from Fort Frontenac to the Gulf of Mexico, there being only one carrying place, half a league in length, where Lake Ontario communicates with Lake Erie."

La Salle went to France, in 1873, and petitioned the King for a grant of Fort Frontenac; his proposals were favorably entertained, and on the 13th day of May, 1675, Louis XIV conferred upon him the seigniory of Fort Frontenac and the parts adjacent

by an instrument, of which the following is a translation :

COMPEIGNE, 13th May, 1675.

" The King having caused to be examined, in his Council, the proposals made by Robert Cavalier, Sr., De la Salle, setting forth that if it should please His Majesty to grant him, his heirs, successors and assigns, the fort called Frontenac, situate in New France, with four leagues of adjacent county, the Islands named Ganounkouesnot and Kaouenesgo, and the adjoining islets, with the right of hunting and fishing on said lands and in the lake called Ontario, or Frontenac, and circumjacent rivers, the whole by title of Fief, Seignory, and Justice (appeals from the Judges of which will be to the Lieutenant-General of Quebec) and the Government of said Fort Frontenac, and letters of noblesse, he would cause considerable property he possesses in this kingdom to be transported to the said country of New France for the erection and establishment there of settlements, which may, in the lapse of time, contribute greatly to the augmentation of colonies in said country. Said De la Salle offers to reimburse the sum of ten thousand livres, the amount expended for the construction of said Fort Frontenac ; to keep in good order the said fort, and the garrison necessary for the defence thereof, which cannot be less than that of Montreal ; to maintain twenty men during nine years for clearing the land which shall be conceded to him ; and until he shall have a Church built, to keep a priest or friar to perform Divine service and administer the sacraments ; which expenses, etc., the said De la Salle will defray at his sole cost and charges, until there be established above the Long Sault, called Garonouoy, some individuals with similar grants to that he demands, in which case those who will have obtained said grants shall be bound to contribute to the said expenses in proportion to the lands which will be granted to them ; and having heard the report of Sieur Colbert, Counsellor of the King in his Royal Council, and Comptroller-General of Finances, His Majesty in Council has accepted and does accept the said De la Salle's offers, hath in consequence granted to him the property of the said fort called Frontenac, and four leagues of adjacent country, computing at two thousand toises each league, along the lakes and rivers above and below said fort, and half a league, or one thousand toises, inland ; the

islands named Ganounkouesnot and Kaouenesgo and the adjacent islands, with the right of hunting and fishing on said Lake Ontario and circumjacent rivers. The whole by title of Fief, and in full Seigniory and Justice; on condition that he cause to be conveyed immediately to Canada all the effects he possesses in this kingdom, which cannot be less that the sum of 10,000 livres in money or movables; that he produce a certificate from Count de Frontenac, His Majesty's Lieutenant-General in said Country; reimburse the sum of 10,000 livres expended in the construction of the said fort; put and maintain it in a good state of defence; pay and support the garrison necessary to defend it, which is to be at least equal to that of Montreal; likewise maintain twenty men during two years to clear the land, who shall not be otherwise employed during that time; cause a church to be erected within the first six years of his grant, and meanwhile to support a priest or friar for the administration of the sacraments; also induce the Indians to repair thither, give them settlements, and form villages there in society with the French, to whom he shall give part of said land to be cleared, all which shall be cleared and improved within the time and space of twenty years, to be computed from the next (1676), otherwise His Majesty shall be at liberty, at the expiration of the said time, to dispose of the lands which shall not be cleared or improved. His Majesty wills that appeals from the judges (to be appointed by the said De la Salle within the limits of the said country conceded by His Majesty) be to the Lieutenant-General of Quebec; and to that end His Majesty wills that all donatory and concessionary letters hereunto necessary, be issued to the said De la Salle, together with those for the Government of said Fort Frontenac, and letters of noblesse for him and his posterity."

La Salle returned from France proprietor of a seigniory, which—all things considered—was one of the most valuable in the colony. So Parkman says. With him came Francis de la Foret as his lieutenant. La Salle set vigorously to work to improve his lonely little empire and fulfil the conditions on which he held it. Within two years of the date of his grant, the palisaded fort of Frontenac was replaced by one of hewn stone, of which, however, only two bastions with their connecting curtains were completed, (the enclosure on the water side being formed of

pickets); the stone wall was 93 toise, or 555 feet in length, three feet thick and fifteen high. Within the fort were a barrack, a well, a bakery, very fine barns and stables. Near the shore, to the south, was a cluster of small houses of French inhabitants; hard by, an Indian village. Half a score or more of soldiers, with two officers and a surgeon, formed the garrison; while in addition 30 or 40 masons, laborers and canoe-men lived in the fort. Two Recollet friars—Luc Berisset and Louis Hennepin, looked after the spiritual welfare of the community. For these the Seignior built a house outside the walls, and part of this they turned into a chapel. One of these men, Hennepin, shortly afterwards made for himself a name and a reputation, by his discoveries and wondrous travellers' tales.

Soon La Salle had vessels built which navigated every part of the lake, kept the Iroquois in check, deprived the English (without violence) of a part of their trade, and closed the passage to deserters from the French settlements.

The land was granted, as we have seen, to La Salle, "by title of Fief and in full seigniory and justice." He was the Seignior. What were his rights, what his privileges and duties as such? A glance at these will teach us something of the feudalism which Louis XIV imposed upon Canada. At that time the system existed in France with its teeth drawn, and many of the abuses still lingering there were lost in the passage of the Atlantic. Parkman says that Canadian feudalism was made to serve a double purpose—to produce a faint and harmless reflection of French aristocracy—and simply and practically to supply agencies for distributing land among the settlers. Both of these ends Louis had in view when he made his grant to La Salle, he gave him letters of noblesse for himself and his children, and bound him to keep men to clear the land and then to parcel out a part of it among them.

The seignior was the immediate vassal of the Crown; when he received his land he had to do homage for it, either to the king or his representative: and this had to be done to make a good title whenever the land passed to a new proprietor; without sword or spur, with bared head and one knee on the ground the new seignior knelt to his suzerain or his representative. From time to time the seignior had to report to the king the state of of his seigniory (*aveu et denombrements*). Some of the other

duties expected of La Salle, as to settlement, buildings and clearings, we have already seen, and doubtless other seigniors were similarly bound.

King Charles II., of England, was far more liberal than his brother of France in his gifts of wild lands; he gave the whole of the Empire State of New York to the Duke of York, subject only to the payment of 40 beaver skins whenever they should be demanded, or within ninety days thereafter; and he granted to "the Company of Adventurers trading with Hudson's Bay," well nigh half a continent, upon condition that they should yearly pay to the sovereign two elks and two black beavers, whenever he should happen to be in their domain.

The condition of cleaning the land within a certain period, under pain of forfeiture, was a distinctive feature of Canadian feudalism, It was a hard stipulation upon a penniless noblesse, who could not dig, who could not sell, and who therefore had to rent for a trivial return. It was a condition, too, frequently enenforced. Whenever a seigniory changed hands, through sale or gift, the new seignior had to pay one-fifth of its value to the crown, by way of fine. (*Quint.*) This pretty well prevented all speculative dealings in real estate. Fortunately, a reduction of about one-third was generally made for cash. If on the death of a proprietor the land went to the direct heir, no fine was payable; if, however, it passed to a collateral heir, one year's revenue was demanded.

The Seigniors had judicial powers (*haute, moyenne et basse justice*); theoretically they could try within their own courts, all felonies and high and petty misdemeanors. We fancy, however, the Canadian seignior, like the English squire, generally confined his attention to very small matters, as he seldom built a prison on his seigniory. A few had special powers, and erected permanent gibbets and pillories, and on these erections the armorial bearings of the seignior were emblazoned. La Salle was not burdened with these high privileges, so no gaunt, grim gibbet stretched out its shining arm over our fair waters; but he had, in common with many others of his class, the right to appoint judges within his country. These had power to entertain accusations of every kind, except high treason, coining base money, carrying arms without a license, unlawful assemblies and assassinations. We incline to

believe that these justiceships were not very much sought after, as their possessors were not permitted to receive any salary or emoluments except what the seignior chose to pay them, and such impecunious lords of the manor as La Salle were not apt to spend much money for the purpose of bringing law and justice to their tenants doors. Appeals lay from these seigniorial courts to the Lieutenant-General and his court at Quebec. The king himself generally nominated the Prevost—or Lieutenant-General.

La Salle could not sell any of his land until he had cleared it; so to obtatin any return he had to rent it to some one who could, and would, clear and till, and in exchange pay rent in money or produce; the produce being chiefly eggs, chickens and wheat. This tenure was called *en censive*, and the tenant the *censetaire*. What land rented for per acre in those old days in these parts we cannot say—but in other places in Canada Parkman says it was "almost ludicrously small"; it was usually two sous per arpent, (or acre), one being for the annual recognition of the tenure (*cens*), the other being deemed the annual value (*rentes*). If the payment was to be in wheat, that cereal was valued at two sous per quart, it being worth about forty sous per bushel. Sometimes the rent was but half we have named, For the credit of our native land we would say that Parkman's expression, "almost ludicrously small," was even more applicable to lands in the then British colonies—now the United States. In Virginia, in Maryland, in Pennsylvania, in Carolina, oftentimes one shilling was the total rental of 50 acres; the Dutch farmers paid the patroons of New Netherlands for a farm some five pounds of butter or a couple of loads of wood. In one case, in South Carolina, a single ear of of Indian corn each year paid the rent of 3000 acres of land.

But if La Salle rented out his lands like others of his class—like them he had perquisites besides his rent. The tenant had to grind his grain at the seignior's mill, and the latter took one bushel in every fourteen for his pay; if the tenant disliked the seignior's mill and went elsewhere with his grist, he still had to pay the seignior. (This was called *banalité*). The tenant had to take his bread to his seignior's oven to be baked—what toll was taken for this, we regret we cannot say. There was a mill and there was an oven at Fort Frontenac. The tenant had to do one or more days work for his seignior each year, (this was called

corvee), and he had to give him one fish in every eleven caught in the waters near by the farm. Then again, if the *censetaire* sold his holding, the seignior received one-twelfth of the purchase money, from the buyer, by way of a fine (*lods et ventes*); if, however, the *censetaire* passed over to the majority, his heirs took the land without any payment. The seignior had a right to take stone and wood for the repair of the manor house from the tenant's land; some even claimed the right to take for the repair of churches, parsonages and mills as well, paying nothing therefor, and to take oaks for vessels and mills, and pine for masts, without compensation. If a seignior thought his tenant had sold his land below its value so as to defraud him of his just rent, he had a right to take it himself at that figure (*droit de retraite*). These were some of the burdens which made the seigniorial tenure, by which Wolfe Island was held, "repugnant to the ideas and feelings of the people" of Upper Canada, and made Charles Wm. Grant and the others ready to give up their old title and take a new one.

La Salle was not made to be a mere merchant or farmer. From his fort he wandered off on voyages towards the setting sun, leaving his friend and vassal, the Sieur de la Foret, in charge. Frontenac ceased to be governor—M. de La Barre ruled in his stead. While La Salle was voyaging on the Mississippi and winning boundless regions for the king of France, the governor was compassing his ruin; and at last, pretending that the seigniory was forfeited because a sufficient garrison was not maintained, he sent some of his myrmidoms who seized the fort and that therein was, ejected La Foret, turned the cattle into the fields of grain, sold the stores, devoured the provisions and left "the fort exposed to the insults of the Iroquois, without any other defence than that of a kitchen boy and another person to take care of the cattle." The faithful La Foret was a man of action, he hurried to France, interceded with the King, and soon returned with orders to Le Barre to give back the fort and to do nothing adverse to the interest of La Salle—a man whom I (wrote Louis) "take under my particular protection."

In November, 1685, La Salle, by an instrument under the hand seal of La Foret, his attorney, duly authorized for that purpose, confirmed a grant for the island now called Wolfe, with its

appurtenances, to James Cauchois, upon the terms and conditions mentioned in the original grant from Louis XIV. Probably this is the first conveyance of any part of what is now known as Ontario from one subject to another. With the appurtenances of Wolfe Island doubtless went that fertile tract called Simcoe Island; this was formerly known and is marked on the map attached to the deed under discussion as "Ile aux Forets," but without doubt its correct name was Ile de la Foret, after this faithful attorney; it would hardly be appropriate to call an island "the Isle of Forests," when the forest primeval was all around. When this deed was signed, and Cauchois became the owner of the 30,000 acres conveyed, poor La Salle was wandering with a few comrades, ragged and forlorn, among the swamps hard by the Mexican Gulf, far to the west of the object of his earnest quest, the mouth of the Mississippi. The year before he had sailed from France with an ill-assorted, ill-starred company, to establish a fort and found a colony where the Father of Rivers pours its mighty torrent into the ocean, so that he might gain for France all the trade of the boundless regions drained by that river and its tributaries. From that fatal expedition our hero never returned —he fell a victim to a traitor's bullet, and his body, with mockery and insult, was left naked and bloody, the prey of foul birds and ravenous beasts, beside the waters of a lonely river in the far away regions of Texas.

In summing up the character of this man, Parkman says: "It is easy to reckon up his defects, but it is not easy to hide from sight the Roman virtues that redeem them. Beset by a throng of enemies, he stands—like the King of Israel—head and shoulders over them all. He was a tower of adamant, against whose impregnable front hardship and danger, the rage of man and of the elements, the southern sun, the northern blast, fatigue, famine, delay, disappointment and deferred hope, emptied their quivers in vain. That very pride, which Coriolanus-like, declared itself most sternly in the thickest press of foes, has in it something to challenge admiration. Never under the impenetrable mail of paladin or crusader, beat a heart of more intrepid mettle, than within the stoic panoply that armed the breast of La Salle."

In course of time Cauchois died and without a will, leaving his daughter, the fair Mary Madelaine, his heiress; she married

a man unknown to fame—one Curotte he is called and nothing more. At last Mary Madelaine died also, and the island passed to her heir-at-law, her eldest son, James Francois Curotte. He cared not for the things of this world, but entered the holy priesthood and became Curè of the Parish of St. Peter, Riviere-du-Sud ; in March, 1784, he conveyed all his right, title and interest in these maternal acres to his half brothers, Amable and Michael Curotte.

About the beginning of this century the Curottes, Amable and Michael, sold all their rights in the Island to David Alexander Grant and Patrick Langan ; and these names introduce to us two families known far and wide in the struggles between France and England for the possession of this continent. Through David Alex. Grant we come upon a family in which were heroes fighting under the *fleur-de-lis*, and which Parkman calls the most truly eminent in Canada. He was a Captain in the 94th Foot, and in 1781 married Marie Charles Josephe Le Moyne de Longueil, Baroness de Longueil, only daughter of the third Baron of that illustrious name. The Captain died intestate in March, 1806, leaving as his eldest son and heir-at-law the Hon. Charles Wm. Grant, in our patent named and who became, on the death of his mother, the fourth Baron de Longueil, and his daughter until her death a few weeks ago still owned a considerable portion of the Island. A word or two concerning these de Longueils, so well known in history and romance. The first baron, Charles Le Moyne, was the second Seignior of Longueil ; in the first year of the eighteenth century Louis, by the Grace of God, King of France and Navarre, considering it his duty to reward those whose courage and merit led them to perform great deeds, and taking into consideration the services which had been rendered to him by the said Charles Le Moyne and his father, "created, erected, raised and decorated the said estate and seigniory of Longueil with the name, title and dignity of a barony, to be peacefully and fully enjoyed by the said Sieur Charles Le Moyne, his children, heirs and descendants, together with the name, title and dignity of a baron" and the patent expressed the King's wish and pleasure that he should call himself by such title. The first baron had eleven sons and two daughters ; the sons were all mighty men—men of renown. The eld-

est, Charles, the second baron, fell in action at Saratoga; the second son, Jacques, was killed at the siege of Quebec; Pierre le Moyne d' Iberville, the third son, with his brothers St. Helene and Maricourt, won fame in the expedition that in early spring marched from Quebec against the English in Hudson's Bay (an expedition well described in "The Trail of the Sword," by that rising Canadian novelist, Gilbert Parker); afterwards he gained the Cross of St. Louis fighting in Acadia—he was the first white man to do what poor La Salle died in attempting—enter the Mississippi from the sea. The tenth son, Jean Baptiste Le Moyne de Bienville, was with his brother d'Iberville in his voyaging to the Mississippi. He was one of the founders of New Orleans and the first Governor of Louisiana. The other sons fought and bled and died for the lilies in divers positions and different climes. The portrait of Bienville still graces the walls of Alwington,* where for a time dwelt the fifth and the present baron. The third baron was at one time governor of Canada; he led against the British at Monongahela, and died beneath an Indian's tomahawk near Lake St. George. The distinction and title passed to whomsoever held the seigniory of Longueil, and as we have seen the daughter of the third baron carried it into the Grant family, and there it still is in the possession of the sixth baron.

Patrick Langan, who shared with Captain Grant in the purchase from the Curottes, was a gentleman from Limerick who served in the Commissariat and died and was buried here. He died in 1813, leaving, as our deed tells us, three daughters his co-heiresses, Julia, Maria and Charlotte. Julia married the Honorable James Leslie for many years a member of the Legislative Assembly of Lower Canada. Maria was the wife of Archibald Kennedy Johnson, who was a son of Sir John Johnson and grandson of Sir William Johnson, men well known as supporters of the British cause in the conflict between France and Britain, and in the graver struggle between England and her Colonies. Sir William, in 1757, at the head of colonial troops gained at Lake George the first victory for England in that war which was to separate Canada from France; afterwards he took

*The residence of J. A. Allen, Esq., near Kingston.

Fort Niagara, defeating also an army of French and Indians sent to its relief; and in 1760 he led 1,000 Iroquois braves from Oswego to Montreal, and concluded his military career with honour at the surrender of Canada by France. He lived in his latter days at Johnstown on the Mohawk River. Here, too, dwelt his son, afterwards Sir John, and his sons-in-law, possessing large estates and occupying splendid residences until their espousal of the British side against the Americans caused their property to vanish in a moment. In many a way Sir John was a thorn in the side of his enemies; he stirred up the feelings of the Six Nations and secured their hearty and vigorous, though somewhat blood-thirsty, co-operation against the Americans. He himself contended with the Colonists on many a well-fought field during those dark, sad days ere the independence of the United States was recognised. He held the rank of Colonel in the British army and was knighted by a grateful sovereign. According to Bancroft the colors of the Royal Yorkers, his regiment, lost in the skirmish with Herkimer and displayed from the walls of the rescued Fort Stanwix, were the first captured banners that had ever "floated under the Stars and Stripes of the young Republic."

On many another point in our text might we dilate on the reservations contained therein for the Crown and of the lands designated for the use of the Protestant clergy—of the condition that Grant must build a house on the lands granted,—if he had not one already in the Province—on the necessity of any future owner taking the oath of allegiance. But our time has failed, and patience also.

R. VASHON ROGERS.

DANTE AND MEDIEVAL THOUGHT.

II.—THE THEOLOGY OF DANTE CONTINUED.

WE have seen how Dante, finding in all finite beings traces of the divine workmanship, yet regards man as in a peculiar sense made in the image of God. Following Aristotle, as interpreted by Aquinas, he maintains that while man is a being composed of soul and body, he differs from all other beings in the possession of reason. In virtue of this faculty he can make the essence or form of things an object of thought, and thus he is enabled, ascending from lower to higher phases of knowledge, at last to reach a certain knowledge of God. With the faculty of reason is connected the power of free volition, the greatest gift of God to man, and that which makes him most like God. The first man was directly created by God in immortality, holiness and righteousness, but in his pride or self-will he disobeyed the command of God, and involved in his fall the whole of his posterity, whose representative he was.

It is significant that, while Dante accepts the Augustinian doctrine of original sin, he does not hold that the fall of Adam has destroyed the desire for goodness or the freedom of the human will. According to Augustine the human race has been so corrupted by the fall that it cannot do otherwise than sin (*non posse non peecare*), whereas Dante maintains that man has a natural desire for truth and goodness, and falls into error and sin only because he is led astray by "some vestige of that, ill recognized, which shines through them." Freedom of will, again, which seems to him the indispensable condition of moral responsibility, he seeks to justify by the Aristotelian conception of the rational soul as a "substantial form, independent of matter and yet united to it." By a "substantial form" is meant an independent reality, containing within itself a store of energy, which it exhibits in its effects. Like God and the angels, man is self-active, though unlike them he is united to a body which is the instrument of the soul. Because of this union there are certain primitive desires which do

not proceed from the man himself, but, when he becomes conscious of them, the free inherent energy of his own nature enables him to choose between them. Hence arises his moral responsibility for the evil which he does.

In this modification of the Augustinian doctrine Dante shows the influence of the free spirit of the Germanic peoples, and of that conception of a rational human life which was due partly to the influence of Aristotle. But this is not the full explanation of the change; for, in recognizing the freedom of man, with its corollaries of moral responsibility and sin, Dante is the exexponent of ideas which are inseparable from the Christian idea of life. It was Christianity that first brought to light the infinite importance of the individual soul. In the pantheistic religions of the East the higher life is conceived to consist, not in the active realization of the true self, but in the annihilation of will. The natural man is under the illusion that his own personal fate is of supreme importance, and the first step in the higher life is to get rid of this illusion. Blessedness is to be found only in liberation from all personal desires. The Greek conception of life, again, fails to recognize the importance of individual freedom for another reason. In the objective institutions of society man finds his true good, and so long as the state is secure the life of the individual is in itself of no importance. This is the doctrine to which Plato has given expression in his *Republic*, though no doubt we may see in his ideal state a virtual recognition of the inadequacy of the Greek conception. Christianity, on the other hand, affirms the supreme importance of the individual and his responsibility for his own acts. In this sense we may say that prior to Christianity there was no clear consciousness of sin as the act of the individual. Of this consciousness Dante is one of the most powerful exponents. His whole conception of life is dominated by it, and his pictures of the future life, as he tells us himself, are at the same time a presentation of the spiritual condition of man in this life, as by the good or ill use of his freedom he becomes worthy of reward or punishment.

There is, however, another side to Dante's thought. While he recognizes the freedom and responsibility of the individual, he is also aware that the individual cannot be separated from the race; and hence he insists upon the doctrine of the Church, that

evil came into the world by the original sin of Adam and has descended to all his posterity. Thus in the doctrine of the Fall he seemed to find the complement or correction of the truth that the individual is purely self-determined. It can hardly be said, however, that Dante gives us any reconciliation of these opposite aspects of truth: he rather sets them down side by side than attempts to reconcile them; nor indeed can they be reconciled without going beyond the external and mechanical form of the doctrine of original sin and grasping the essential truth which it contains.

The doctrine of original sin as held by Dante draws its support largely from an uncritical reading of the Pauline epistles, and especially of the classical passage in the epistle to the Romans, in which a contrast is drawn between Adam and Christ. That passage has been understood in a way that misses the central idea which the Apostle is seeking to enforce. In various parts of his writings St. Paul draws a distinction between the man who is dead in sin, the man who is conscious of sin, and the man who is delivered from sin. This distinction, in the epistle to the Romans, he applies on a large scale to the course of human history, mainly with the object of proving to his countrymen the necessity of the new revelation of the nature of God as manifested in Christ. In the opening chapters he shows, by an appeal to notorious facts, that the heathen world was sunk in wickedness, although it was self-condemned when tried even by its own imperfect standard of goodness. The source of this moral degradation he finds in a perverted conception of the divine nature. The necessity of a new principle to lift the heathen world out of its religious and moral degradation is, he argues, too plain to need elaboration. But can we say the same of the Jew? Practically the Jew assumes that, because in the Law he has a clear revelation of the divine nature, no further revelation is needed. He fails to observe that the possession of this law has not brought him into a right relation to God. In truth the Law was never meant to produce righteousness, but only to create a vivid consciousness of sin. This is manifest from Scripture itself, as where we read that "there is none righteous, no not one." The only way in which man can be brought into a right relation to God is by faith, as indeed is repeatedly affirmed in the Scriptures themselves.

Having thus shown that all mankind, Jew as well as Gentile, are by nature sinful, that all are more or less clearly conscious of this guilt, and that only by faith can they come into communion with God, the Apostle divides the history of mankind into three great periods. The first period extends from Adam to Moses, the second from Moses to Christ, the third from Christ to the end of the world. In the first man was sinful but was not clearly conscious of his sinfulness. It may be objected that as the Moral Law had not yet been revealed there could be no transgression. But this objection the Apostle meets by pointing out that if there had been no sin, there would have been no death. In the second period there was the clearest consciousness of sin, because the Law had defined in plain terms wherein sin consisted. In the third period begins the supreme revelation of the infinite grace or love of God, and of faith as the only source of righteousness, or the right relation of man to God. The main idea, therefore, which the Apostle has in his mind is the natural sinfulness of the whole human race from the very beginning of its existence. It is in this connection that he is led to refer to Adam. He is not thinking of Adam as sinning for his posterity, but he is bent upon showing that the natural sinfulness of man has manifested itself in every one of his descendents. The idea of sin as externally transmitted from Adam to his posterity is entirely foreign to St. Paul's way of thinking: what he wishes to show is that all mankind are by nature in alienation from God, and can come into union with Him only by a new birth of the spirit. The coarse juridical notion of a punishment imposed upon the human race because of the sin of the first man is due to the false interpretation of minds familiar with Roman law, who did not distinguish between sin and crime. This conception, first formulated by Augustine, was naturally adopted by Aquinas, from whom Dante received it. It was subsequently made a central idea by Calvin, whose mind was in many respects akin to that of Augustine, and it survives even to the present day.

Dante's conception of salvation is the logical complement of his doctrine of original sin. There are two ways in which man might conceivably be liberated from sin: either God might pardon him out of pure mercy, or man might expiate his sin by a humility correspondent to its magnitude. The former conflicts

with the justice of God, the latter is impossible because man could not undergo a humiliation proportionate to the self-assertion implied in disobedience to the will of God. Hence God offered up his Son in man's stead, thus reconciling infinite justice with infinite mercy. We shall in vain seek to comprehend the mystery of the Incarnation; yet divine illumination enables us to obtain a glimpse into it; for we can see that it was the work of the eternal Love, the Holy Spirit, and that, although there is in the "Word made flesh" a union of the divine and human, the two natures yet remain distinct.

This doctrine has the same fundamental defect as the mediæval conception of Original Sin. As in explaining the origin of the world God is conceived to be a divine Architect or an external Creator; as in accounting for the ascending scale of being He is conceived to be the Final Cause towards whom all things tend; so now He is regarded as a Judge before whom a criminal is brought receive sentence. A Judge has no power to tamper with the law: his function is simply to administer it; and hence God is conceived as bound by the immutable law that every offender must be punished in exact proportion to his offence. The sin of man, however, is infinite, because it consists in his seeking to equalize himself with God, and therefore the only adequate punishment is eternal death. On the other hand, God is not merely a Judge, but also a merciful Father, and therefore disposed to forgive the sinner from pure Mercy. But as this would conflict with his Justice, divine Wisdom conceived, and divine Love realized, the vicarious punishment of man in the person of the Son of God.

Now, it is impossible to state this highly artificial doctrine without seeing that it is the product of conflicting ideas which are not reconciled but simply set down side by side. The starting point is the conception of personal sin, one of the central ideas of Christianity. Dante, powerfully impressed, like all the thinkers of his day, with the conception of immutable law as the corner-stone of all social order, naturally enough identifies sin with crime, and therefore conceives of God as an inexorable Judge. But sin is not crime, nor can God be conceived as a Judge. Crime is the violation of the personal rights of another: it is an offence against the external order of the State, and must be expiated by an external punishment. Sin, on the other hand,

is not the violation of the rights of others, but the desecration of the ideal nature of the sinner, the willing of himself as in his essence he is not. Hence sin requires no external punishment to bring it home to the sinner: it brings its own punishment with it in the destruction of the higher life, the realization of which is blessedness. In man, by virtue of the divine principle in him, the consciousness of God is bound up with the consciousness of himself, and he cannot do violence to the one without doing violence to the other. Hence God is not a Judge, allotting punishment according to an external law, but the perfectly holy Being, by reference to whom man condemns himself. No external punishment can transform the spiritual nature. The criminal, after undergoing punishment, may be more hardened in his crime than ever, and yet society must punish him, because its function is to preserve the social bond, which by his act the criminal has assailed. But religion has in view, not the preservation of social order, but the regeneration of the individual: it deals with the inner nature of the man, not with the result of his act upon society; and hence, unless it transforms and spiritualizes him it fails entirely of its end. It is for this reason that the medieval Church in inflicting external puishment violated its very essence. All such punishment is contradictory of the very idea of religion, and therefore of the nature of God.

When Dante says that the sin of Adam consisted in pride, or the attempt to equalize himself with God, he strangely intermingles truth and falsehood. The truth implied in his view is, that in so far as man seeks to realize his true self in separation from God, *i.e.*, in willing his own good in isolation from the good of his fellow-men, he brings upon himself spiritual death. This idea, as we shall see, Dante grasped with marvellous clearness; it is, indeed, the principle by the application of which he peoples his Inferno. But this truth is obscured by the vulgar notion that the sin of man was pride, or an attempt to equalize himself with God—a notion obviously based upon the conception of God as a Ruler whose majesty must be asserted. This pagan conception, drawn mainly from the idea of Cæsar, as the representative of order and law, is entirely foreign to the Christian idea of God. Even Plato sees that "in God there can be no envy." Dante himself virtually denies this utterly false conception of

God, when he speaks of the Incarnation as proceeding from the infinite love of God. Here at last we come upon the only purely Christian idea in the whole doctrine. Stripped of its artificial form it affirms that the very nature of God is self-sacrifice: that, loving his creatures with an infinite love, He can realize His own blessedness only in them. This is the essential idea in the new way of salvation. Man can be saved only as he realizes in himself the spirit of Christ. In taking upon himself the burden of the race he lives a divine life. This is the secret which Christ revealed, and to have made this secret practically our own is to be justified by faith.

If there were the least doubt that Dante was a faithful son of the Catholic Church, the place which the Virgin Mary occupies in his theological creed would be enough to set it at rest. She pervades the whole of the Divine comedy with her benign influence. So great is Dante's reverence for her, that in the Inferno she is never mentioned by name. When the poet shrinks from the awful task of entering the spiritual world, he receives courage to undertake it by being told that "a noble Lady in Heaven" has such sympathy with his irresolution that she "breaks the stern judgment there on high." Mary is thus the representative of that divine mercy from which the whole work of salvation proceeds. In the Purgatory she appears as the compassionate helper of repentant souls. When Buonconte, flying wildly through the night from the battle of Campaldino, falls by the shore of the Archiano, he calls on the name of Mary, and his soul is snatched from the Evil One by an Angel of God. In the valley of the Princes, the souls who had delayed repentance, sit, singing *Salve Regina*, on the grass and flowers. On the second terrace the souls who are expiating the sin of envy, cry "Mary, pray for us!" In the fifth circle the souls lying prostrate, purging themselves of the sins of avarice and prodigality, cry "Sweet Mary" like a woman in travail, and recall how she was so poor that "in a hostelry she laid down her sacred burden." Her humility is shown in the picture of the Annunciation, sculptured on the rock of the first circle. "There was pictured she who turned the key to open the love of God." In a vision Dante sees her in the third circle as the embodiment of patience, "with the sweet gesture of a mother, saying: 'My son, why hast thou so dealt

with us?' Behold thy father and I were seeking the sorrowing." The slothful recall how Mary "ran with haste into the hill-country." The intemperate remember that "Mary thought more how the marriage-feast should be honourable and complete than of her mouth, which now answers for you." The two Angels who guard the valley of the Princes from the evil serpent "came from the bosom of Mary." In heaven her praise is celebrated by all the Saints, who circle round her. When, at the close of his vision, Dante sees the white rose of Paradise, Mary is seated on high, "her face most resembling Christ." "I saw upon her," says the poet, "such gladness shower . . . . that all I had yet seen held me suspended in no such wonder, nor showed me such likeness of God. And that love which first descended thereon, singing *Ave Maria, gratia plena*, in front of her spread out his wings. To the divine song responded on all sides the holy choir, so that every face grew more serene." To paint her divine beauty is impossible; "had I as great power of speech as of imagination, I should not dare to attempt the least of her sweetness." St. Bernard addresses to her the following prayer, which is the very essence of supplication:

" O Virgin Mother, daughter of thy Son,
Lowlier and loftier than all creatures seen,
Goal of the counsels of the Eternal One,
Thyself art she who this our nature mean
Hast so ennobled that its Maker great
Designed to become what through it made had been.
In thy blest womb the Love renewed its heat
By whose warm glow in this our peace eterne
This heavenly flower first did germinate.
Here, in Love's noon-tide brightness, thou dost burn
For us in glory; and to mortal sight
Art living fount of hope to all that yearn.
Lady, thou art so great and of such might
That he who seeks grace yet turns not to thee,
Would have his prayer, all wingless, take its flight;
Nor only doth thy kind benignity
Give help to him who asks, but many a time
Doth it prevent the prayer in bounty free.
In thee is mercy, pity, yea sublime
Art thou in greatness, and in thee, with it,
Whate'er of good is in creation's clime.
He who stands here, who, from the lowest pit
Of all creation, to this point hath pass'd
The lines of Spirits, each in order fit,

On thee for grace of strength himself doth cast,
So that he may his eyes in vision raise
Upwards to that salvation noblest, last."*

At the close of this prayer "the eyes beloved and reverenced of God, fixed on him who prayed, showed us how pleasing to her are devout prayers. They to the Eternal Light were then directed, into which we may not deem that by a creature the eye is able so clearly to penetrate." Mary is thus from first to last the mediator between man and God.

Nowhere is Dante more obviously the exponent of the medieval mind than in the reverence he shows for "the Virgin Mother, daughter of her Son." The position he assigns to her is a poetic rendering of a passage in St. Bonaventura's *Speculum Beatæ Virginis*. "This, I say, is Mary, who was most free from the Seven Capital Vices. For Mary against *pride* was most lowly through humility; against *envy* most affectionate through charity; agaist *anger* most meek through gentleness; against *unconcern* most unwearied through application; Mary against *avarice* was simple through poverty: Mary against *gluttony* was most temperate through sobriety; Mary against *luxury* was most chaste through virginity. All these things we learn from these Scriptures in which we find the name of Mary expressed." It is not hard to understand the depth of devotional reverence which gathered about the name of Mary, though it would be difficult to disentangle the complexity which contributed to it. She is the living symbol of that humility, charity, gentleness, alacrity in kindly offices, renunciation of wealth and charity, which is the medieval ideal of the womanly as distinguished from the manly type of character and which was embodied in the gentle unworldly life of the monastic Saint. Such an ideal exercised a purifying influence in an age when strong and ungovernable passion was only too prevalent. It sprang from the same root as the chivalrous devotion to women which expressed itself in the lays of the troubadour, but it was associated with the deeper religious consciousness which Christianity had introduced. In this aspect of it we can see how it came in to give vividness and reality to the abstractions of a dualistic theology. The separation of God from the world led to the idea of His incomprehensibility; the con-

*Paradise 33, 1 ff; Plumptre's translation.

ception of Him as a stern Judge who inexorably punished sin plunged man in despair; and though this idea was partly transcended in the doctrine of the Incarnation, yet the self-sacrificing earthly life of Christ was so overshadowed by His transcendent heavenly life that its power to awaken love and imitation was almost gone. Thus the love of God, which in theory was affirmed, had lost its practical influence. The repentant sinner, touched with the keenness of remorse, did not feel that that love had any definite bearing on his own life. Thus Mary came to take the place which Christ occupied in the heart of the Christian of an early age. Her soft sympathy he could understand, while yet she was removed from the ordinary sphere of his everyday life, and was thus able to appear in his imagination as the living symbol of divine Mercy. It may be added that the same movement of the mind which found in Mary the concrete presentation of the mercy of God, led to the creation of the host of Saints who figure in the Catholic calendar. Just as Christ had more and more ceased to be human, so Mary became more and more divine, and her place was supplied by Saint after Saint, who seemed to be nearer to humanity. Such a process was necessarily endless, and in fact it is but an expression of the inherent contradiction involved in the primary separation of the divine and the human, the sacred and the secular life; for where the divine is not found in the human but above and beyond it, the process of trying to bring them together necessarily leads to an infinite series. The Reformers were therefore justified in rejecting the Mariolatry and Saint-worship of the medieval church, and insisting that the "eternal womanly" is to be sought in the ordinary life of the wife and mother.

When Dante goes on to speak of the Christian life he separates, as we should expect, between the natural and theological virtues. The highest point reached by philosophical reflection, as it appears in Plato, Aristotle and Virgil, cannot satisfy the innate desire for truth. The noblest minds of antiquity are represented as consumed by a fruitless longing, and this indeed constitutes their only punishment. In a pathetic passage (Pg. 3, 43) Virgil, after referring to the sad state of "Plato, Aristotle and many others," "bowed his head, said no more, and remained disquieted." No one has ever ascended to Paradise "who did

not believe in Christ, either before or after he was nailed to the cross." Faith in Christ is thus the precondition of righteousness. Nor is it enough to possess this faith, but it must be openly professed. Statius, convinced by the unconscious prophecy of Christianity contained in Virgil's picture of the return of righteousness and of the first age of man, accepted the Christian faith, but was "through fear a Christian only in secret, for a long time making outward profession of paganism"; and for his pusillanimity he was confined to the fourth circle of Purgatory for more than four centuries. Faith must manifest itself in act, or the heathen will put Christians to shame. "Many cry, Christ, Christ, who in the judgment shall be far less near to him than those who had no knowledge of Christ; and such Christians the Ethiop shall condemn, when the two companies shall be separated, the one rich to everlasting, the other poor." Faith is "that precious jewel, on which all goodness rests." It is the "entrance to the way of salvation" by which the Kingdom of heaven has been peopled. Heresy, which is the opposite of faith, often springs from pride, as in the case of Sabellius and Arius, who first swerved from the true path and were then too proud to acknowledge their error. All light is from above, darkness is the shadow of the flesh. The false doctrines of heretics are like words which cut and disfigure the scriptures, and therefore in the Inferno the heretics are imprisoned in burning tombs. With Faith is closely connected the virtue of Hope, which is "the sure expectation of the glory that shall be, and comes from divine grace and foregoing merit." God is the object of the Love of all the saints. Both reason and revelation teach us that the more we know Him as he is, the more must love be enkindled in our hearts. And he who is possessed by the love of God will also love His creatures. Without these three virtues no man, however blameless his life, can enter into the kingdom of heaven.

The cardinal virtues, which are all reducible to Prudence, Justice, Temperance and Courage, prepare the way for the theological virtues, which only came to earth with the advent of Christ. The Christian life assumes two forms, the contemplative and the active, the former consisting in the contemplation of divine truth, the latter exhibiting itself in outward activity. The contemplative life, so far as it existed prior to Christianity, is

typically presented as Rachel, the active life as Leah; the Christian life of contemplation is symbolized by Beatrice, the active life by Mathilda. By a special vow the Christian may dedicate himself to the practice of good works, which are not essential to salvation. Thus he gives up his free will, the most precious treasure which he possesses. The Church may liberate the individual from his vow, but not without substituting something else in its stead. Dante has the highest reverence for the religious orders, which he regards as specially instituted in the providence of God for the salvation of the Church; and hence he depicts with especial sympathy the lives of St. Francis and St. Dominic. These self-sacrificing men seemed to him perfect types of the ideal life.

The contrast of the cardinal and the theological virtues, and of the contemplative and the active life, is another instance of the dualism which pervades the whole of Dante's thought. He admits, indeed, that the virtues of Prudence, Justice, Temperance and Courage, to which, following Plato, he reduces all the natural virtues, assume a new form under the influence of the theological virtues of Faith, Hope and Love; but this does not prevent him from regarding the contemplative as higher than the active life. Now, we need not repeat what has already been said as to the confusion between faith as the informing spirit of the Christian life and faith as the acceptance of a particular formulation of doctrine. Taking faith in the former sense, we see at once that it cannot be separated from the natural virtues without losing its meaning. As Dante himself admits, faith must realize itself in action; in other words, only he who finds his life by losing it in others is possessed of a saving faith. But the so-called "cardinal" virtues are just the form which that faith assumes in actual life. Prudence or practical wisdom is the wise adaptation of means to ends in so far as it makes for the social good, and thus it implies the pursuit of all those sciences by which the welfare of the whole is realized. To have a genuine faith is to discharge faithfully our special function in the social organism. Thus we can see how the Christian idea of faith spiritualizes the physical and moral sciences by employing them as the means for the development of an ideal humanity. To conceive of them as purely secular is to separate what elsewhere Dante himself joins

together, namely, the love of God and the love of man; and the separation inevitably leads to the false and pernicious doctrine, that the social well-being may be left to take care of itself. How otherwise than by the exercise of practical wisdom is the true means of promoting the common good to be discovered?

What has been said of Prudence is of course equally true of the other cardinal virtues: indeed these are simply aspects of the same thing. Justice, as the means of preserving and promoting social order, is simply practical wisdom applied to the sphere of politics; Temperance is the wise self-restraint which is essential in the discharge of all social functions; and Courage is the moral heroism which shrinks from no danger that has to be faced in the discharge of one's duty, though for historical reasons it is apt to be limited to the military profession. Thus all the natural virtues are the expression of an active, practical faith.

As the natural virtues all spring from one principle, so the three theological virtues are merely different aspects of that principle. Hope is that attitude of the religious mind in which the individual lives in the practical conviction that the soul of the world is good. It is thus the antithesis of all pessimism. In the consciousness that all things work together for good, man is lifted above the anxieties and disappointments of his every-day life, and sees already fulfilled in idea what in actual fact is only in process of fulfilment. Hope, in short, as a form of the religious consciousness, is the conviction that evil must be overcome by the irresistible power of goodness. And, finally, Love is manifestly the expression of faith and hope; it is the Christian spirit realizing itself in the Christian life through all the channels by which the ideal of humanity is advanced.

Now, although Dante has not entirely neglected this practical aspect of the Christian life, he cannot get rid of the medieval idea that the contemplative is higher than the active life. If this only meant that it is the religious consciousness which gives meaning to life by presenting it as the process in which the individual is enabled to view his own petty efforts as contributing to the triumph of goodness, there would be nothing to object. But, viewed in this way, the opposition of the contemplative and the active life is meaningless. The true life of man is neither in reflection nor in action, but in both; in other words, it is not the

special function which a man discharges, but the spirit in which he discharges it, that makes his life divine. Dante's contrast of the contemplative and the active life does not correspond to the life of the thinker as distinguished from the life of the practical man, but to the sequestered life of the monk or nun as compared with the every-day life of ordinary humanity. But, in admitting that the active life is compatible at all with the life of faith, he has practicably surrendered the opposition of secular and sacred. If the contemplative life, as he understands it, is higher than the active, the latter must be essentially inconsistent with the Christian ideal; the logical inference from which is, that all should take upon themselves the vows of poverty, celibacy and obedience; *i.e.*, that society and even the race itself should cease to exist.

How strong a hold this idea of the religious life as something apart from the secular life had upon Dante's mind is shown by his maintaining that there are good works which are not essential to salvation. No greater contradiction of the Christian ideal of life could well be conceived. For that ideal throws into relief the inadequacy of any actual realization of the supreme good; and it is the contrast between the ideal and the real which is the source and inspiration of all spiritual progress, whether in the individual or the race. Only an external and mechanical conception of the religious life can permit anyone to imagine for a moment that a man may claim merit for anything that he can do. With all his fine insight and strong religious spirit Dante here shows in the most unmistakable way the limitations of his time. In a sense no doubt he was a "Reformer before the Reformation," but only in the sense in which all the best minds of the Middle Ages might be so named. Theoretically he has not grasped the principle which lay at the very heart of the Reformation, the principle that works are not the source of merit, but only the outward manifestation of the life of the spirit.

JOHN WATSON.

THE SHULEMITE.

A PARAPHRASE OF THE BOOK OF CANTICLES.

PREFATORY.

WHATEVER sins the "Higher Criticism" may be charged with, at least this much should be placed to its credit, that it has made one book of Holy Scripture more intelligible, and given it an ethical value which it lacked before. That book is "The Song of Songs," which has always been a perplexity to commentators. What is its motive, its teaching? At first sight it is anything but moral, let alone religious. No allusion to any devotional or religious subject is made in it; the Divine Being is not mentioned.* Taken in its bald literalness it appears as a collection of amatory lyrics, which, however beautiful as poetical compositions, are no more conducive to piety than the Odes of Anacreon or Horace. Why then was it enrolled in the Canon, when such a book as "Wisdom" was relegated to the Apocrypha?

The only way in which it could be utilized for a religious purpose was to consider it as an allegory, and to read into it allusions to "the mystical union betwixt Christ and His Church." But the allegory was often far-fetched, and it was always an unsatisfactory thought that the book *had* to be allegorized in order to render it acceptable to a pious mind. Whether we consult dear, quaint, old Matthew Henry (whose commentary in many respects is still unexcelled) or study the fathers or those modern expositors who so largely quote from them, we think we can trace through them all the same under-current of dissatisfaction with their own efforts, as if they had said, This is the best we can make of it.

Its claim to a place in the Canon was supposed to be that King Solomon was its author; and it was conjectured that he composed it as an "Epithalamium" to celebrate his nuptials with

*To be sure in Cant. VIII, 6, in the original word יָהּ occurs as a suffix, but it does duty simply as a superlative, and is so rendered in A. V.

the princess of Egypt. Now, it is true that "his songs were a thousand and five;" (I Kings, iv, 22) and it is possible that some of these might have been composed for the occasion mentioned, or indeed to celebrate any of his most numerous marriages. But the sacred scriptures speak of these marriages with reprobation as offensive to God and bringing ruin on the nation. The passage in Deuteronomy (xvii, 14-20) evidently reflects on Solomon, either prospectively or retrospectively, according as we adopt the conventional or the "Higher" criticism. It is therefore hard to imagine that such an occasion should have been selected for the special operation of the Holy Spirit, or that the monarch should have been *then* a fit subject for divine inspiration. Still the "Epithalamium" theory has been the one usually enforced. I have heard sermons by learned divines wherein this sonorous word was solemnly brought in as a sort of "clencher" of all discussion; and no doubt simple pious minds have been overawed by its sound; like the old lady we read about who declared the sermon did her so much good whenever it mentioned that sweet word, Mesopotamia.

But even granting the above hypothesis, that it was composed by Solomon, on the occasion of his marriage, one naturally enquires, What is the purport of the poem? what is the argument? Who is the speaker? Who is addressed? A most cursory glance would shew that it is not always the same speaker, nor the same person or party who is addressed. Hence very early the idea was mooted (e. g. by S. Gregory Nazianzen) that it was a *dialogue* rather than a pure lyric. The Revised Version has accentuated this idea by separating the different stanzas. But if a dialogue, then who were the speakers and what were their several parts? Interpret it which way they would the whole matter was most unsatisfactory so long as it was taken for granted that King Solomon was its author.

But the "higher criticism" has emphasized the idea that it was written not *by*, but *about*, King Solomon. I say emphasized the idea, for the modern critics did not originate it. In the now old-fashioned commentary of Patrick, Lowth, Whitby and Arnold, Bishop Lowth in his prolegomena to the Books of Canticles notices that, in the word לִשְׁלֹמֹה the prefix ל does not neces-

sarily indicate the Genitive but rather the Dative or Ablative case, corresponding to the Latin *de* or the Greek *περὶ*. In that case it should read, "The song of songs which is *concerning* Solomon."

Acting on these suggestions—viz: (1st) that the song is a dialogue or rather a crude drama, and (2nd) that it is concerning Solomon and not by him—modern critics have transfigured the song from a merely amatory ode, with no apparent aim save a sensual one, into a dramatic piece with a highly moral motive. Under this aspect it supplies a want which seemed to be in the Old Testament before, a want which no one like Solomon could supply, viz: a commendation of pure connubial love, the most important factor in all the problems of humanity, the greatest motive power of all social life;

—"The love
Of man and woman when they love the best."

Tennyson's King Arthur says:—

"For indeed I know
Of no more subtle master of the mind
Than is the maiden passion for a maid,
Not only to keep down the base in man,
But teach high thought, and honourable words,
And courtliness, and the desire of fame,
And love of truth, and all that makes a man."

and Coleridge sings:—

"All thoughts, all passions, all delights,
Whatever stirs this mortal frame,
All are the ministers of Love,
And feed his sacred flame."

And the word of God had said from the beginning, "For this cause shall a man leave his father and mother and shall cleave unto his wife, and they twain shall be one flesh."

But what could King Solomon, with his 700 wives and 300 concubines, know of this pure love? Fancy Juliet being wooed by Romeo to become one of a whole lot of wives, or Desdemona or Imogene, or Rosalind! Indeed, import the idea of *polygamy* into any one of Shakespeare's plays, and you ruin it. And we may say the same of the creations of any of our great English poets.

The question then arises, if Solomon was not its author, by

whom and when was it written? Internal evidence (such as the mention of Tirzah, vi, 4—compare I Kgs. xv, 21, and xvi, 15-18,) indicates some seer of the northern kingdom as the author, and the reign of Baasha or Zimri as the time—say B. C. 930, fifty years or so after Solomon's death.

Accepting this view we have in our book a drama—in a crude form to be sure—in which the polygamy and luxuriousness of Solomon are satirized, and the simple country maiden's love and fidelity to her peasant lover triumph at last over the king's passion; and so the Song of Songs conveys a high moral lesson. And no doubt it had its political significance also at the time. "A poem in the northern dialect, with a northern heroine and scenery, contrasting the pure simplicity of Galilee with the corrupt splendour of the court of Solomon, is clearly the embodiment of one phase of the feeling which separated the ten tribes from the house of David." (Prof. Robertson Smith's article on "Canticles" in Encycl. Brit.)

We have called the poem a drama in a crude form; for composed four or five hundred years before the golden age of Greek Tragedy, we may well look upon it as exhibiting a rudimentary stage in the evolution of the Drama. Want of the accessories of scenery, etc., would necessitate fewer speakers and fewer "acts"; we might expect that much would be told in oblique narration; and so forth.

The argument of the piece is briefly this: King Solomon in one of his royal progresses through the northern part of his kingdom, sees in his vineyards near Shulem (or Sunem) a beautiful maiden. He arranges with her brothers, who are her guardians, to have her sent to his harem in Jerusalem. She however remains true to her country lover and rejects the King's offers, even that of making her one of his queens. His advances are always met with the cry; "I am my beloved's and my beloved is mine!" King Solomon at last, overcome by her steadfastness, generously restores her to liberty. The poem ends with the re-union of the lovers.

In the original form the scene appears to have been laid throughout—with the exception of the closing verses (viii, 5-14)—in the royal palace. The interlocutors were few, viz: The Shulemite maiden, the King, and the Chorus which consisted of the

"Daughters of Jerusalem" or the inmates of the royal harem. All the incidents leading up to the position appear to have been recited by the Shulemite to the Chorus—the harshness of her brothers, the devotion of her peasant lover, her abduction by the King. So the lover and her brothers did not appear on the stage till the close.

In the following paraphrase I have somewhat modernized the play by introducing the lover to speak his own words. So we have three "Acts." In the first the scene is laid in the vineyard. In the second we have what transpired in the palace. In the third we have the re-union of the lover in the scene of the first act. To effect this some transposition of the stanzas was necessary, and some gaps had to be filled up. The diction is as far as possible that of the authorized version, the changes made being slight and mainly for the sake of clearness.

The idea of the following setting of the play was suggested by an admirable article by Miss Ellice Hopkins in *The Century* of April, 1883, which itself is based on the Commentary of Ewald. See also the article on "Canticles" by Prof. W. Robertson Smith in the Encyclopedia Britannica, Canon Driver's Introduction to O. T., etc.

The figures on the right hand of the page refer to the Chapter and verse of the song in either the Authorized or Revised Version which should be compared.

By this form it is hoped that the intention and *spirit* of the poem are brought out; though it be at the expense of close adherence to the *letter*.

G. F. LOWE.

DRAMATIS PERSONÆ.

Bashemath—the Shulemite—a young maiden.
Saphir—a young shepherd—lover of Bashemath.
Carmi, *Shual*, *Teresh*—Brothers of Bashemath—owners of a vineyard.
King Solomon—
Chorus—of "Daughters of Jerusalem" *i.e.* the Queens and other inmates of King Solomon's harem.
Soldiers and attendants of the King—
Rustic maidens—

THE SHULEMITE, ACT I.

Scene.—A Vineyard in the North country of Palestine, with a cottage or lodge therein—an apple-tree in blossom, vines, etc. A large latticed window or loggia to the cottage.

Time of King Solomon.

The three brothers on the stage, ready to go to work in their vineyard.]

Carmi. We have a little sister, viii. 8
and she is as innocent as a child:
What shall we do for our sister
in the day when men shall ask for her?

Shual. We will wall her round as if she were a hoard viii. 9
of silver;
we will enclose her with boards of cedar.

Teresh. Her beauty shall not be for the glances of a peasant;
she shall delight the heart of the King.

[Exeunt Brothers to their work.

The Shulemite appears at the window.]

Bash. O children of my mother, you were angry with me i. 6
and made me the keeper of the vineyard;
but mine own vineyard I have not kept.
Not to the harem of King Solomon shall I ago,
O my brothers,
but to him whom my soul loveth,
where he maketh his flocks to rest at noon,
for I am my beloved's and he is mine.
Hark! the voice of my beloved!
Behold, he cometh leaping on the mountains,
skipping gaily on the hills like a roe or young hart.
Behold, already he standeth behind the wall of i. 9
our own vineyard,
and will soon be at the lattice of the window.
Let me hide and hear his call.

[Bashemath retires out of sight and Saphir enters.

Saphir. Rise up, my love, my fair one, and come away! i. 10-14
For lo! the winter is past,
the rain is over and gone;
the flowers appear on the earth,
the time of the singing of birds is come,
and the voice of the turtle is heard in the land!
The fig-tree putteth forth her green figs,
and sweet is the smell of the vines
with the young grape.
Arise, my love, my fair one, and come away!
Oh, my dove hidden like one in the clefts of the rock,
in the secret places of the stairs,
let me see thy countenance,
let me hear thy voice;
For sweet is thy voice and thy countenance is comely!

Bashemath re-appears at the window and sings a familiar vineyard song.]

Bash. Catch the foxes,
the little foxes that spoil the vines;
for the vineyards are in bloom with the young grapes.
My beloved is mine, and I am his;
he feedeth his flock among the lilies.

Saphir. Turn my beloved, until the day break
and the shadows flee away,
And be thou like a roe or a young hart
upon the mountains of Bether.

[Exit Saphir.

Enter the three brothers. Bashemath joins them.]

Carmi. Who is this that cometh up from the desert like pillars of smoke;
perfumed with myrrh and frankincense,
with all the scents of the merchant?

Shual. Behold! 'Tis the train of the King! the glorious iii. 6-11
Solomon comes
borne aloft on his litter,

Threescore mighty men are about it,
of the valiant in Israel,
the most expert in war.

Teresh. Solomon's gorgeous litter of Lebanon's cedars,
the pillars thereof of silver,
the flooring thereof of gold,
and the canopy purple.
Bringing jewels and gifts,
the delight of the daughters of Zion.

All four. Go forth, O ye daughters of Zion,
and hail the glorious Solomon
Wearing the crown wherewith his mother crowned him
in the day of his marriage,
when in gladness of heart he brought home his Egyptian bride.

Enter King Solomon in state, borne on the royal litter or palanquin, with attendants. He addresses Bashemath.

King Sol.

Lo! thou art fair, my friend! Lo, thou art fair!
Thine eyes gleam like those of doves amid thy locks;
Thy hair shines like the silken-coated goats that browse on Mount Gilead:
Thy lips are like a thread of scarlet;
thy temples are like a piece of pomegranate:
Thy neck stately as the tower of David
surmounts a bosom fair as the lilies.
Until the day break, and the shadows flee away,
I will get me to the mountain of myrrh.
and to the hill of frankincense.
Thou art all fair, my love;
there is no spot in thee.

[Exeunt *King* and retinue.

The Three Brothers.

O sister, thou art a precious ointment; i. 2-4
thou will be brought into the chambers of the King;
we will be glad and rejoice in thee,

The love of the King will be sweeter than wine ;
the maidens of the court will praise thee
loyal people will have thee in regard.

ACT II.

Scene.—The interior of King Solomon's palace in Jerusalem. Chorus of the "Daughters of Jerusalem," *i.e.*, the Queens and other inmates of the Harem.

Bashemath decked with chains of gold, jewels, etc., with a large nosegay in her hand or bosom.

Bash.

I am black, but comely, O ye daughters of Jerusalem, i. 5-17
comely as the tents of Kedar,
as the curtains of Solomon.
Look not with scorn upon me because I am swarthy,
because the sun hath browned me ;
my brothers made me work in the vineyard.
But where art thou whom my soul loveth,
where feed'st thou thy flock ?
where dost thou make them rest at noon ?
Why should I be here like one that has turned aside
by the flocks of thy companions ?

Chorus (ironically).

If thou know not, O thou fairest among women,
go thy way forth and follow the footsteps of the flock
go back to thy beloved and feed thy kids
beside the tents of the shepherds.

Enter *King Solomon*, who addresses *Bashemath*.]

King Sol.

I would compare thee, O my love,
to the steeds that draw the chariot of Pharaoh.
Thy cheeks are comely with rows of jewels,
thy neck with chains of gold.

Bash. (disregarding the king).

While the king sitteth at his table, i. 5-17
the spikenard giveth forth its fragrance ;

So is my beloved to me,
as a bundle of myrrh,
as a cluster of camphire in the vineyards of En-gedi.

King Sol. Behold, thou art fair, my friend;
behold, thou art fair;
thou hast doves' eyes.

Bash. (still disregarding the presence of the king and addressing her absent lover).

Behold, *thou* art fair, my beloved,
yea, thou art pleasant.
Our couch is in the dale
under the lofty cedars and the spreading fir.
For I am but a wild flower of the plains
and a lily of the valleys

King Sol. As a lily among the thorns, ii. 2
So is my friend among the daughters.

Bash. As the apple-tree amongst the wild growth of the woods,
So is my beloved among the sons.

King Sol. Console her, daughters of Jerusalem, till I return.

[Exit King Solomon.

Bash. By night on my bed I sought him whom my soul loveth;
I sought him but I found him not.
I sleep, but my heart waketh; v. 2
it is the voice of my beloved that knocketh,
"Open to me, my sister, my love, my undefiled; v. 2-16
for my head is filled with dew,
and my locks with the drops of the night."

. . . . . .

I opened to my beloved;
but my beloved had withdrawn himself, and was gone;
My soul failed when he spake:
I sought him but I could not find him;
I called him, but he gave me no answer.

The watchmen that went about the city found me,
they smote me, they wounded me;
the keepers of the walls took away my veil
from me.
I charge you, O daughters of Jerusalem,
if ye find my beloved,
that ye tell him, that I am sick of love.

Chorus. O, thou fairest among women,
what is thy beloved more than another,
that thou dost so charge us?

Bash. Oh! chief among ten thousand is my beloved!
his head is as the most fine gold;
his locks are curled and black as the raven;
his eyes are like the eyes of doves;
his cheeks are like sweet flowers
his lips like lilies shedding sweet perfume;
his hands are like gold set with jewels;
his body is like ivory overlaid with sapphire;
his legs are like pillars of marble;
fair as the cedar of Lebanon is his countenance
his mouth is sweet;
yea, he is altogether lovely.
Such is my beloved, O daughters of Jerusalem!

Chorus.
Where is thy beloved gone, fairest among women? vi. 1-13
where is he turned aside, that we may seek him
him with thee?

Bash. My beloved is gone down into his garden of spices,
he feedeth his flocks among the lilies
I am my beloved's,
and my beloved is mine.

Enter *King Solomon*. *Bashemath* looks scornfully at him.]

King Sol.
Thou art beautiful as Tirzah, my friend,
fair to see as Jerusalem,
yet terrible also as an army with banners.
Turn away thine eyes from me,
for they overcome me.

Threescore in number are the queens
and fourscore the concubines, besides virgins;
but thou art the fairest.

Bash. I am my beloved's
and my beloved is mine.

(Here King Solomon vanquished by the Shulemite's persistence gives her liberty to leave.)

Bash. (departing).
I go to my garden, to see the fruits of the valley,
to see whether the vine has flowered
and the pomegranates budded.
Or ever I know, I shall be set in the carriages
of my own kindly country people.

[Exit Bashemath.

King Sol. Return, return, O Shulemite!
return, return, that we may look upon thee.

Chorus. What do you see in the Shulemite,
with her contemptuous regard?

[The scene ends with the chorus singing and dancing to distract the king's mind.

ACT III.

Scene.—The vineyard as in Act I. On the stage the three brothers and some rustic maidens.

All Sing. Catch the foxes, ii. 15
the little foxes
that spoil the vines,
for our vineyards are in bloom.

Carmi. Who is this that cometh up from the wilder- viii.5-14
ness
leaning upon her lover?

Shual. Is it not our mother's daughter,
she that was brought up under our tree?
Here was she born and brought up.
Enter Bashemath and Saphir arm-in-arm.]

Saphir. Come with me to Lebanon, my bride!
with me to Lebanon

Let us look from the top of Amana,
from the top of Shenir and Hermon,
from the haunts of the lion and the leopard.
Thou hast ravished my heart, my bride!
thou hast ravished my heart
with the glance of thine eye,
with the turn of thy neck.
How sweet is thy love, my bride,
thy love is sweeter than wine,
honey and milk are under thy tongue.
A garden enclosed is my bride,
a fountain of waters sealed,
a fountain of living waters,
of streams from Lebanon.

Bash. Awake, O North wind!
and come thou South!
Blow upon my garden
that the spices thereof may flow out.
Let my beloved come into his garden,
let him eat its pleasant fruits.

Saphir. King Solomon had a vineyard at Baalhamon;
he let out the vineyard unto keepers;
Everyone was to bring for the fruit thereof
a thousand pieces of silver.
O Solomon, have thou thy thousand,
and thy keepers their two hundred.
My vineyard, which is mine, is before me.

The brothers come forward and recognize Bashemath.]

Brothers. Behold, it is our sister,
she who found favor in the eyes of the king.

Bashemath and Saphir.

Yes, love is as strong as death;
jealousy is cruel as the grave;
Many waters cannot quench love,
neither can the floods drown it.
In vain shall a man give all his substance to buy love,
all the wealth of his house;
it would be utterly despised.

THE EARTH AND THE PHYSICAL UNIVERSE.

(CONTINUED FROM THE APRIL NUMBER.)

I.

THE Geologist must, in the main, proceed along lines of thought and research quite different from those pursued by the physicist. He has no fixed and established mathematical theorems which he can call to his aid in the explanation of his phenomena and upon the results of which he can rely with anything like implicit confidence.

The earth is, so to speak, the growing, developing organism which he is to study, and its growth is so slow as scarcely to make itself appreciable during the history of geologic thought, and not even to become prominent during the whole authentic history of the human race.

Here it can be truly said that a thousand years are as but a single day. And yet, from observations carried on for only about a century, and confined to very much less than one-fifth of the surface of this slowly developing planet, the geologist must draw his inferences and frame some reasonable and probable theory of the past history of the earth, and of the length of time during which it has been undergoing its development, since it settled down upon it own account and began to clothe its fiery nakedness with a garment of solid rock, or to ordain itself with the products of organic life. The task appears to be a Herculean or even an impossible one; and in some respects it is so.

The geologist is certainly not in a position to dogmatize upon the length of geologic time, but his observations have created in him, strong convictions in regard to this age, and on the average he believes it to be very great, many times greater than the physicist has hitherto been inclined to allow him.

Let us then consider the nature of the geologist's observations and try to draw some logical inferences from them; and if we do not follow such an order as would be adopted by any leading geologist, we may follow such a one as best suits our purpose.

For the present, putting theory altogether aside, let us confine ourselves to observed facts.

When we dig into the earth's crust we become acquainted with three very distinct kinds of rocks, one of which is always present if we go down far enough, and which may lie at the top with the

others absent, or may even interpenetrate the others. This rock which is always present is igneous or granitic, well exemplified in granite, syenite and lava, a hard crystalline substance in which the distinct crystals of its constituent minerals can frequently be detected by the unaided eye.

It forms the great mass of the interior of mountain chains, and underlies all other rocks as far as is known, in the superficial and observable layers of the earth's crust. Of what may be in the deep interior we have no knowledge.

The granitic rocks frequently break through the other rocks lifting and thrusting them aside as if driven on by some enormous force from below, and producing in these latter, wherever they come into contact with the former, a peculiar change, which plainly points to the transforming influence of a very high temperature.

Not only so, they frequently interlaminate themselves between the layers of the other rocks, filling up the intermediate lacunæ, just as hot melted pitch will fill the interspaces between the stones in a concrete pavement.

Only one inference can be drawn with respect to the origin of these rocks. Their crystalline structure, their disposition relatively to the other rocks, and their whole conformation indicate that they have at some time in the past cooled and solidified from a hot and liquid condition. And from their universal distribution they plainly show that whatever the interior of the earth may have been, its surface at least, as far as we are capable of examining it, was once a vast waste of glowing liquid rock matter; and from the phenomena of volcanoes, earthquakes, elevations and subsidences to be observed at the present day, it seems natural to infer that the interior of the earth, at some considerable depth, is in much the same state yet, although this is an open question which we have no purpose at present in discussing.

The second great class is that of the stratified rocks, which, whether consisting of limestones, or sandstones, or shales, or even beds of loose sand or debris, always lie in layers or strata, reaching at times, in orderly succession, through depths of thousands of feet, and extending over wide regions of a country or even of a continent. These are in general never crystalline, al-

though they may, as in the case of sandstones, consist of minute particles of crystalline rocks cemented together by some kind of calcareous or argillaceous cement.

On the other hand many of them, as certain limestones, and possibly all limestones, are clearly due to the force of organic life, being composed of infinite numbers of microscopic shells or casts from animals or plants, held together by some intergranular cementing substance.

The granitic rocks are exceedingly durable, offering great resistance to the action of both air and water. The stratified rocks, upon the other hand, undergo a *weathering* process or gradual disintegration upon exposure to the atmosphere, the cementing substance as also the calcareous granular constituents being slowly dissolved by the action of rain water charged with carbonic acid.

The third division of rocks lies between the granitic or igneous and the sedimentary. These rocks are like the granitic in being crystalline in structure, and unless composed of limestones, as marble, in being also very hard and compact and durable, and they are like the sedimentary rocks in being more or less distinctly stratified, or in showing evident lines of stratification.

These are the metamorphic rocks, and from their character and relative positions it is quite evident that they are stratified rocks which, from coming in contact with hot igneous rock and being acted upon by other formative influences, have slowly been transformed or metamorphosed into that state in which we now have them.

And now having got a superficial acquaintance with the three classes of rocks which constitute the covering shell of our globe, let us see what lessons we are to draw from them, and what insight into the past history of the earth we can acquire by a study of their conformations.

Just as the granitic rocks have come into their present form under the influence of a molten state and an exceedingly high temperature, so the stratified rocks, whether now metamorphosed or not, have all at some time been deposited as fine sediment at the bottoms of great bodies of water. So that the existence of sedimentary and metamorphic rocks indicates the previous existence of a sea, and also that of some other kind of rock to form a

sea bottom, and sufficiently cool to allow water to rest upon it; it also indicates the formation of sediment by the grinding down and carrying away, by means of moving water, some other form of previously existing rock which was either above the sea or very near its surface.

It is difficult, if not impossible, to imagine the state of things which prevailed when the first crust began to form upon the molten globe, and when all the waters of the sea, and many other present solid constituents of the earth were suspended in a dense and seething atmosphere which, swayed here and there by tempestuous and terrific storms, broke up time and again the congealing surface crust, and left it rough and jagged like the ice which in winter forms upon the agitated surface of some wind-swept pond.

The rocks thus formed, the primitive rocks in the earth's covering, were certainly not sedimentary or metamorphic, and whether they were the same as our present igneous rocks or not, they were closely allied to them. It is highly improbable that any of these primitive rocks remain in the crust now, for the miles of sedimentary and metamorphic rocks which constitute so large a part of the present crust of the earth, must all have been derived from the original rocks through the agencies of wind, and rain, and waves, and running streams of water, and animal and vegetable action. And thus the formation of rock matter, and the grinding down and disintegration of this in order to form new rock matter has gone on incessantly since the first rock was formed and geology began, and much of the original material has been worked over again and again throughout the long geologic ages.

Long stretches of time must have passed away after the first crust began to form before it became thick enough and cool enough to allow the condensation of the vapors from the atmosphere and the formation of seas, or rather a sea, for it is quite probable that at this first stage the whole of the earth's surface was covered by the gathering waters.

But in order to form sedimentary rocks we must have a sea charged with matter in suspension, which may gradually settle down as the waters become quiet, or containing calcareous or other matters in solution, from which plants or animals may

secrete their cretaceous or silicious coverings. And a sea of any great depth can have matter in suspension only when such matter is being constantly poured into it by rapid streams of water which gather their loads in the upland hills and carry it downwards to the sea; for still water can not hold heavy matter like rock-material in suspension for any considerable length of time. And thus the existence of sedimentary rocks involves the previous existence of high land, and probably rain, and running streams of water, and flowing rivers.

It is claimed by a few who may be called short-time geologists and by some physicists that the rate at which geologic changes are taking place now is no criterion as to the rate which prevailed in the distant past, inasmuch as the disintegrating and denuding actions must have been much more rapid in the geologic ages when the seas were literally hot, and the temperature of the earth was high, than they are under present conditions.

This may be true; but it does not seem difficult to show that however long such a state of affairs existed, it had mostly passed away before the deposition of the oldest sedimentary rocks with which we are at present acquainted, namely the Silurian.

Animals do not live in very hot water, and never have so lived, so far as we have reason to believe. And yet animals and plants of a low order lived in the waters and on the land in the old Silurian times, and left their remains in the Silurian rocks as a forcible testimony to their existence.

Moreover the Silurian rocks consist in large part of limestones, and if these are the products of secreting organisms it seems probable that the rate at which these rocks could be built up in hot seas might be even less than in seas of a moderate temperature; for the sparingly soluble calcic carbonate which constitutes these limestones, and which must have been in solution in the waters of the sea, is less soluble in hot water than it is in cold water.

Also, if it is true, as claimed by Indian geologists, that there was an ice age in India in Silurian times, it follows that matters, as far at least as temperature is concerned, could not have been radically different in those times from what they are at present.

We know, again, that the deposition of rock matter in form-

ing these ancient sedimentary rocks did not take place with anything like violence or commotion, or with exceeding rapidity, for the trails of worms, and the tracks of animals which crawled over the impressible mud of the beach, and the little pits made by the rain drops of the passing shower, and the small corrugations formed by the ripple beating upon the sandy shore, are preserved for us in these oldest of sedimentary rocks.

Of course, life upon the earth could not have begun with the Silurian rocks, although these are the oldest stratified rocks which give us clear and undeniable evidence of the existence of living things. If then these are very old, the primitive condition of things in which life first made its appearance must be referred to a period much more remote.

The sedimentary rocks were laid down at the bottom of a sea, but they are now found at all elevations above the sea level, in low and high lands, upon the elevated plateau, flanking the sides of mountain chains, and in some cases resting upon the very summit. How did they get there?

Earthquakes and other seismic disturbances occasionally elevate or depress considerable tracts of land; but these influences are altogether too local and restricted to be credited with the widely extended and continuous changes which have elevated or depressed whole countries, or even whole continents, and lifted aloft the mountain chains.

Many portions of the earth's surface, owing to some force apparently acting from within, are being slowly raised or depressed, the action taking place over large stretches of country, and being so slow as to be detected only after the lapse of many years, or even of centuries.

Thus the peninsula of Scandinavia is being raised while the opposite coast of Russia appears to be sinking. In like manner the coast of France about Cherbourg, and the Channel Islands are slowly sinking, while many parts of Europe, and of all the continents, are undergoing similar changes. And it is doubtful, in fact, if any part of the earth's surface is in a state of fixed and permanent equilibrium.

Given time enough, and these movements, however slowly effected, will account for any elevation of sedimentary rocks to be found. But time enters here as an important element, and

there are no good reasons for believing that the movements indicated have ever been carried on at a faster mean rate than at present.

That the action from below is not violent or eruptive, but slow and continuous, is indicated by the fact that layers of rock so uplifted are not broken or destroyed, but at most thrown out of their original horizontal position, and sometimes twisted or contorted into long sinuous curves.

The elevated ridges of these contorted strata formed hills, which, either in the process of rising above the surface of the sea when they would be subjected to the action of the waves, or afterward by the influence of rain or general weathering, were disintegrated and carried away to the sea again, leaving the edges of the various strata exposed. How long such a state of things then lasted it would be in vain to conjecture, but judging from the stability of our present continents, the time would in all probability have to be counted by hundreds of thousands of years.

But after the lapse of many ages these uplifted strata were sunk again to form a sea bottom and upon their partly upturned edges new strata were deposited in an approximately horizontal position, and the whole new system was afterwards elevated so as to come under the observation of the geologist.

And thus the stratified rocks, as they now present themselves, are not composed of a regular sequence of horizontal strata lying above one another like the courses in brick-work or the leaves of a book; in many places whole groups of strata are absent, because they have been washed away, or more probably because that particular locality was dry land during the long ages that these strata were being formed by precipitation upon the bottom of the sea.

Nor do the strata, if at all numerous, in any one place lie regularly and conformably upon one another; for one group may lie upon the edges of a more or less inclined and older group, and these again may be similarly disposed in relation to a still older group. And thus, in general, the elevation and depression of the rocky crust of the globe have taken place not merely once, but many times in succession; and in every case while rocks were being formed in one region of the earth's surface, other

regions were dry land and furnished the material for the upbuilding of the nascent strata.

As all rocks must have been formed by the wearing down or denudation of other rocks, the rate of denudation, if known, would give us some idea as to the rate at which rocks grow while in the process of formation. But denudation is effected in several ways, and these are not characterized by any uniformity of rate.

First, when a tract of sea-bottom is being raised above the surface of the sea, it is brought directly under the denuding action of the surface waves; and the upper layers of the tract, being comparatively new and soft, might be cut away with some rapidity. But if the tract being elevated were of any great extent, the shallowness of the water would effectually protect all but the very borders of the tract, by becoming a barrier to the onward flow of the waves. So that such denudation, while being particularly active within small limits, could be neither extensive in its effects nor long-continued in any one locality.

The second way is by the action of the sea upon the land which forms its shores. These shores are being continually cut down and carried away, the debris being distributed over the adjacent sea-bottom. The rocks formed in this way are mostly sandstones and conglomerates, rock of which the constituents readily sink in water. The argillaceous matter from the corroded shore would be carried further out and be deposited as fine silt, while the calcareous matter would to a large extent go into solution and be finally secreted out by living organisms. The sandstones and conglomerates formed in this way could never be very extensive, but would form mere bands, fluctuating in width and composition with the character of the shore from which they were derived. This process of denudation, like the first, of which it is a mere modification, would soon bring about effects which would tend to prevent its own action. For a shore acted on in this way, would, after some time, become shallow and shelving, from the continuous deposition of rock matter, and would thus withstand pretty effectually any further action of the waves.

The third process of denudation, and the one which is probably the most general, and the most effective upon the whole, is

the continuous action of rain, frost, heat, etc., upon all lands above the sea, and therefore exposed to atmospheric influence.

The least amount of observation shows how slowly but surely these influences do their work, and there is no cogent reason for assuming that they ever worked at any faster rate since the advent of the Silurian age.

Civilization, although it may clean away the forests and dry up streams and change the courses of rivers, yet leaves the general conformation of the earth's surface unchanged. The hills still stand round about Jerusalem as they did three thousand years ago, and the site of Troy is still the same as it was when Priam reigned over that ill-fated city.

In fact the whole time covered by human history is too short to bring about such general effects of denudation as may be detected with anything like certainty, and it is only by observations made in special places where some local influence is particularly active that such effects can be clearly followed and appreciated. And yet the whole exposed surface of the land is being gradually changed by the slow but never ceasing process of denudation.

Rivers are continually pushing their mouths into the sea by filling up the whole vicinity with matter brought down from the interiors of islands or continents, as witness the Mississippi of North America.

Herodotus says that the land of Egypt was formed by the river Nile, and he is probably correct. But the land of Egypt was laid down before the dawn of that nation to which Herodotus belonged, and the beginning of the formation of that land is probable hundreds of times more remote from the present than was the birth of Herodotus. And yet Egypt has been formed by debris, produced by the forces of denudation acting upon the elevated regions in the interior of Africa, and brought down to its present position by the historic Nile.

Rain and frost and wind act over the whole extent of the land, but rivers, besides bringing sediment from a higher to a lower level, act in their own distinctive manner. In their slower parts they tend to raise their beds and overflow their banks, and thus to produce plains or bottom lands, while in their rapid reaches they cut away both bed and bank and tend to form gorges and canons.

The Niagara has been about ten thousand years, according to American geologists, in cutting the gorge from the falls to Queenston. Here is a mighty rushing river, dashing over a precipice from 150 to 200 feet high, and yet requiring ten thousand years at least to cut out a comparatively narrow channel through soft limestone rock, and only about 6 miles long.

What time then must have been consumed by the Colorado in digging a channel some hundreds of miles in length and in places about a mile in perpendicular depth? And yet these rivers began to flow, and the land of Egypt to be formed in what geologists would call quite recent times, that is, recent as compared with the long geologic ages which preceded them.

It is considerations like the foregoing that influence the geologist in his estimation of the time during which the earth has been undergoing its development, from the period when the first stratified rock was formed down to the present time.

The whole authentic history of man extends over about five thousand years, and the amount of geologic change which has been effected in that time amounts to almost nothing. And there are very strong evidences, derived from cave explorations and other cognate matters in Great Britain and on the continent of Europe that prehistoric men existed in these localities, and hunted animals of which the very species are now extinct, upwards of ten thousand, and possibly from eighty to one hundred thousand years ago. And yet all that man has done, and all the records of the presence of prehistoric man to be found in his accustomed haunts, are confined to the latter and a comparatively small portion of the last and shortest geologic age in the earth's history.

And when the geologist considers the enormous and almost innumerable changes which have taken place and left their indisputable records in the rocks, and the great length of time which was required for even the least of these changes, it is not at all to be wondered at that he should require, for the complete development of the earth, a stretch of duration many times longer than the physicist is disposed to allow.

N. F. DUPUIS.

THE LEGEND OF ULYSSES IN DANTE AND TENNYSON.

(CONTINUED FROM THE APRIL NUMBER.)

II.

IN the six centuries that have passed since Dante wrote his *Divina Commedia*, our intellectual horizon has been undergoing a steady process of purification. Every century has contributed to clear away the fictitious and superstitious elements of the world of fantasy piously created and bequeathed to us by the wonder-loving mind of the middle-ages. The world of Dante with its mediæval mysticism and terrors, with its curious theological and political framework, its supernal and infernal splendours, has disappeared. The veritable dragons and chimæras that the imagination of the 13th century saw ramping along the borders of the sky and the known world have been touched by a decomposing ray and turned into dust and little water drops. The curtain has been raised that hid that unknown world beyond the Pillars of Hercules, and the mystery of land and ocean is gone. Gone too are the Holy Roman Empire and the crown imperial, the Guelf and the Ghibelline, and all that strong and richly coloured yet half barbaric civilisation which produced in the same age the saint of Assisi and the tyrants of Milan, Giotto's Campanile and the *Gesta Romanorum*, the Sicilian Vespers and the Wartburg Tournament, the theology of Aquinas and the tales of Chaucer and Boccacio. But this marvellous world of the past ages has not passed away without leaving something behind it. It may be said to appear again for the modern spirit in ideal forms of poetry and art, in the faerylands of Ariosto, Spenser or Keats, and in schools of painting, song, and sculpture which recall the idyllic figures of the bucolics of Theocritus and Virgil, the visions of Dante, the tales of Boccaccio and the story of Arthur, a beautiful world of legend in which the modern spirit can still find fitting symbols of the ideal. There blow the zephyrs, there the lotus blooms, and Oenone wanders in the vale of Ida; there the breezes may bear your silken sails down to tower'd Camelot, or to Bagdat's shrines of fretted gold, the home of the good Haroun Alraschid.

There is the vale of Avalon and wounded Arthur watched by weeping queens. And with this legendary world filled with the creations of 'the supreme Caucasian mind' there blends easily and naturally all that is noble and pathetic in history, all that time has hallowed and made memorable for men, from Homer 'the Ionian father of the rest' to young Columbus 'pacing mute by ocean's rim,' to Milan and 'the chanting quires.'

This is the 'Palace of Art,' the heritage of the cultured, of which Tennyson is often a delicate interpreter for us. He has great merit as the poet of certain features of English life; the squire, the parson, the farmer, the miller, the idyllic scenes of English country life are tenderly and exquisitely touched in his poems. But outside of England, when he travels in Italy, on the lake of Como, it is not the blue waters or the olive-clad hills, or the marvellous sky and sunshine, or the sunburnt peasant that catch his fancy as they do that of Browning. It is the verse in which Virgil has celebrated the district, 'the rich Virgilian rustic measure,' the rhythm of the second Georgic, that haunts his ear and fills his imagination. In Milan, it is the achievment of the middle ages, 'the giant window's blazoned fires' and the 'hundred spires' of the great cathedral; in Genoa it is the old hall which recalls the long departed glory of the Dorias and the Spinolas,

> A princely people's awful princes,
> The grave, severe Genovese of old.

In such cases Tennyson is emphatically the scholar-poet, and almost more of the scholar than the poet: for though none touches them more happily and hardly any with so much of the tenderness and appreciation of the scholar, it remains true that Tennyson's imagination is rather delicate and refined than powerful. He does not recreate those worlds of the past for us as Keats can in *Endymion* or *Isabella* or *St. Agnes Eve*. He is critical, allusive, scholarly, rather than profoundly creative. The idyllic world of Theocritus, the Daphnis idyll, the tale of Boccaccio lives again in Keats; the classic Pantheism, the conception of the mighty mother takes new life from the hands of Shalley. But *Oenone* and *Tithonus*, even the *Lotus-eaters*, for all their sweet, smooth verse remain unreal and shadowy, without that deep sense of underlying reality which inspires Keats's picture of the Lamia or Shelley's *Hymn of Pan*. Short as it is, the *Ulysses* is the most

powerful of Tennyson's poems in this style, and this is in a great measure due to the fact that here he has the support of the strongly constructive and dramatic genius of Dante.

The fundamental conception of the poem is the irresistible instinct of Ulysses to resume the wandering life of the adventurer and explorer. There is no hint of this in the Odyssey where it is with no pleasure that Ulysses hears from Teiresias the divine command to make another voyage on the deep. (Od. xxiii, 263-8.) But it is an essential part of Dante's conception of Ulysses, the very secret of that restless, striving and much daring soul, as Dante with a fine anticipation of the great navigators and explorers of modern times conceives it. The first words that Dante hears Ulysses speak strike this note: "Neither the sweet bond of a son, nor pious affection for an aged father, nor the love I owed Penelope, which should have made her days joyful, could quell within me the desire I had to see the world and the ways of men in their vice and in their virtue." This is Tennyson's theme which he paraphrases and expands with a true poet's power till he has made the haughtily plain and reserved style of Dante intelligible to the modern ear.

> I cannot rest from travel: I will drink
> Life to the lees: all times I have enjoy'd
> Greatly, have suffer'd greatly, both with those
> That loved me, and alone; on shore, and when
> Thro' scudding drifts the rainy Hyades
> Vext the dim sea: I am become a name;
> For always roaming with a hungry heart
> Much have I seen and known.

That is magnificent translation in the larger sense of the word, and perhaps the only adequate translation, when a true poet takes the pen and translates not merely the sense but the inward force, the indefinable power of his original, so that contemporaries can feel the pathos and the poetry that lie locked up in unfamiliar style and rhythm.

It is true there seems to be something of a new note, something characteristic of the modern self-consciousness in that Faust-like yearning to exhaust the joys of life, to 'drink life to the lees,' and in that romantic delight peculiar to the northman in breaking seas and blustering winds. All that is alien to the

classical spirit and unfamiliar even to Dante who was no Venetian or Genoese sea-rover but a land-loving Florentine of the thirteenth century. But it is the modern equivalent of that spirit of adventure which is the distinctive character of Dante's Ulysses.

This is the relation of Tennyson to Dante throughout the poem. The fundamental ideas are there in Dante expressed in a powerful though somewhat severe and condensed form, an austere parsimony of style in which every word takes its force from the dramatic intensity of the situation; while in Tennyson the same ideas are repeated in a more expansive and lyrical manner, slightly modified here and there by touches of romantic sentiment which though not entirely absent are severely repressed in Dante. Thus it is Dante's invention and quite unsanctioned by Homer, 'that little band of companions who did not desert me,' and of whom he says in his quiet way "And I and my companions were old and worn when we came to that narrow strait where Hercules set up his pillars for a mark that men may be warned not to go beyond them." Then Ulysses makes his 'little oration' to them, "O brothers, who through a hundred thousand perils have reached the western bounds of the world, do not refuse, etc." The plain and simple words of Dante draw their force in a great measure from the dramatic power of the situation; there is no need of elaboration or adornment. In Tennyson all this becomes lyrical and is expressed with effusion. The romantic feeling of adventure which is latent in Dante, implicit in the situation, becomes explicit in Tennyson.

> There lies the port; the vessel puffs her sail;
> There gloom the dark broad seas. My mariners,
> Souls that have toil'd and wrought, and thought with me—
> That ever with a frolic welcome took
> The thunder and the sunshine, and opposed
> Free hearts, free foreheads—you and I are old;
> Old age hath yet his honour and his toil;
> Death closes all: but something ere the end,
> Some work of noble note, may yet be done,
> Not unbecoming men that strove with Gods.

This curious resemblance in fundamental ideas, as of thoughts restated for the new point of view and enlarged feeling of a later age, and yet substantially the same, is very apparent in the appeal

which in both poems Ulysses makes to his companions. In Dante Ulysses says with a heroic scorn of ease for the few years of life left them, "O brothers, this little bit of waking life yet left us, do not refuse to it the opportunity of exploring this new world—where men have never passed. Consider the seed of which you are; ye were not made to live like brutes but to follow virtue and knowledge." That is all; but the scornful emphasis on the words "this little bit of waking life," *questa tanto picciola vigilia* is hardly to be rendered in a translation; and is not less admirable than the powerful simplicity and brevity of that

Fatti non foste a viver come bruti
Ma per seguir virtute e conoscenza.

'Made ye never were to live like as the brutes do, etc.'

In Tennyson it is the same restless, eager soul that expresses itself; but there is a modern note of subjective melancholy, of contemplative yearning and unrest

Yet all experience is an arch wherethro'
Gleams that untravell'd world whose margin fades
For ever and for ever when I move.
How dull it is to pause, to make an end
To rust unburnished, not to shine in use
As tho' to breathe were life. Life piled on life
Were all too little, and of one to me
Little remains.

In Dante the thirst of Ulysses to have experience of that mysterious world 'without people' beyond the straits has something of the mediæval love of the wonderful and the miraculous. Tennyson modernizes this into a more refined and developed consciousness of the mystery of man's life, a brief moment of consciousness surrounded by the silence of eternity

but every hour is saved
From that eternal silence, something more
A bringer of new things; and vile it were
For some three suns to store and hoard myself
And this gray spirit yearning in desire
To follow knowledge like a sinking star
Beyond the utmost bound of human thought.

But at bottom it is the same conception somewhat disguised by the more flowing and lyrical manner of the nineteenth century and re-edited, so to speak, for the wider sense it has of life Thus

at every remove, Horace, Dante, Tennyson, we are taken further from the actual Homeric Ulysses by the very process of interpretation which shows us the implicit ideal it contains. Even Horace in his epistle to Lollius depicts an ideal which is not quite explicit in the Odyssey; Dante goes still further on the same road, and Tennyson completes the process by giving us a Ulysses with the refined and enlarged sense of life characteristic of the 19th century. Dante's Ulysses is under the spell of an unknown and mysterious globe as yet unexplored. He is the contemporary of Marco Polo and Mandeville and is certain to encounter magic and monsters on his voyage. In Tennyson this is transmuted into modern sentiment, the glamour and mystery of the sea which has still some hold on the imaginative mind.

> The long day wanes; the slow moon climbs; the deep
> Moans round with many voices.

It is true towards the end of the poem, Tennyson has inserted some beautiful lines designed to recall the magic and mystery of the world as it existed for the ancient and mediæval mind

> for my purpose holds
> To sail beyond the sunset, and the baths
> Of all the western stars, until I die,
> It may be that the gulfs will wash us down:
> It may be we shall touch the Happy Isles,
> And see the great Achilles, whom we knew.

That is a fine kind of local colour, but were it not for the exquisite touch which harmonizes all, we might feel that however beautiful in itself, however appropriate to the Homeric and even the Dantean Ulysses, it took something from the significance of the rest of a poem which might, almost every word of it, be the address of some famous sea-adventurer of modern times, a Raleigh or a Frobisher, to his companions. The poem in short is a very beautiful expression of the modern romantic spirit of adventure which though at bottom the same in every age to that of Homer backwards, yet may be fitly represented, as it is here, as having a refinement and self-consciousness peculiar to itself. Even in that justification of his wandering propensities which Ulysses feels himself obliged to make to Telemachus, there is something distinctively modern, the justification of a character and its actions not by any external conception of law but by the inward law of

its own development. The lines contain an excellent picture of two strongly contrasted types and are more profoundly original than anything else in the poem :

> This is my son, mine own Telemachus,
> To whom I leave the sceptre and the isle—
> Well-loved of me, discerning to fulfil
> This labour, by slow prudence to make mild
> A rugged people, and thro' soft degrees
> Subdue them to the useful and the good.
> Most blameless is he, centred in the sphere
> Of common duties, decent not to fail
> In offices of tenderness, and pay
> Meet adoration to my household gods,
> When I am gone. He works his work, I mine.

A most beautiful description of the office of a ruler, an Oswald or an Alfred, in an age just emerging into civilized life. The characterisation of the home-keeping type is delicate and true, the phrase plain and powerful like that of Dante and deriving as in him a double force from the dramatic setting

> Most blameless is he, centred in the sphere
> Of common duties, decent not to fail
> In offices of tenderness.

We see then what Tennyson's poem is. The framework, the fundamental conception, even the leading ideas are substantially those of Dante, but Tennyson has breathed the breath of modern life into it, has renewed and recreated its spirit so to speak into a form adapted to the modern mind and representing more clearly the modern consciousness of life. In one sense Tennyson's poem is so entirely based upon Dante's that it might almost be called a translation, a noble translation of one great poet by another into the language and sentiment of his own age, perhaps the only really adequate and successful kind of translation. But after all there is something of the universal character of poetic work in this. Even the most original of poets is generally, in a more or less obvious way transforming or building upon the work of his predecessors, but in Tennyson's Ulysses as in Virgil's Eclogues this relation is more than usually conscious and evident.

But there is a curious and very characteristic difference in the manner of the two poets. Dante's style is severe and reserved,

It reads like what it is, a scroll of doom where there are no words but what are strictly necessary and every one of these of fatal importance. It is a style natural to Dante, fluid enough in its shaping to catch and reflect every phase of feeling but adamantine in its settled and final state like a cut gem; but it has a special appropriateness as the language of the personages of the Inferno who speak from a region where the hopes and fears and the common sympathies of humanity have almost ceased to exist.

Dante's Ulysses is not unconscious of the heroism, the mingled terror and pleasure of wandering on the wide ways of ocean. He feels what is poetic and romantic in that, too, and in the fidelity of his aged companions, but it is all condensed in a single emphatically placed word or phrase

Ma misi me per l'alto mare aperto
Sol con un legno and con quella compagna
Picciola, *dalla qual non fui deserto*

"*alone* on the great ocean with that small band who never deserted me." In Tennyson these details blossom out into picturesque description

There gloom the dark broad seas. My mariners,
Souls that have toil'd and wrought and thought with me—
That ever with a frolic welcome took
The thunder and the sunshine, etc.

Tennyson's style is lyrical and effusive, Dante's grave, reserved and dramatic.

There is another merit which one would like to notice in this poem of Tennyson's. It is in my opinion the most perfect and sustained specimen of his blank verse which we possess. It is the golden mean between the somewhat broken and unorganized blank verse of his English idylls and the sweet but often rather nerveless movement of his rhythm in the Idylls of the King. In the *Ulysses* there is not a single lapse. Every rhythm whether ornate, as

Far on the ringing plains of windy Troy

or plain, as

I am a part of all that I have met

is admirable; every pause, however unusual, is excellently placed, as in the line

but every hour is saved
From that eternal silence, something more
A bringer of new things.

It has all Tennyson's characteristic grace and sweetness with more strength and candour than is usual. There is constant variety yet everywhere perfect naturalness. In the verse of Ulysses he has really succeeded in uniting some of the best qualities of *terza rima*, as Dante uses it, its fluidity, its freedom and variety of movement, its natural dignity and the emphatic power of its accents and pauses.

JAMES CAPPON.

FROM RUSKIN.

ON A PICTURE OF BOTICELLI'S.

I PROMISED some note of Sandro's* Fortitude, before whom I asked you to sit and read the end of my last letter ; and I've lost my own notes about her, and forget, now, whether she has a sword, or a mace ;—it does not matter. What is chiefly notable in her is—that you would not, if you had to guess who she was, take her for Fortitude at all. Everybody else's Fortitudes announce themselves clearly and proudly. They have tower-like shields, and lion-like helmets—and stand firm astride on their legs,—and are confidently ready for all comers.

Yes ;—that is your common Fortitude. Very grand, though common. But not the highest, by any means.

Ready for all comers, and a match for them,—thinks the universal Fortitude ;—no thanks to her for standing so steady, then !

But Boticelli's Fortitude is no match, it may be, for any that are coming. Worn, somewhat ; and not a little weary, instead of standing ready for all comers, she is sitting,—apparently in reverie, her fingers playing restlessly and idly—nay, I think—even nervously, about the hilt of her sword.

For her battle is not to begin to-day ; nor did it begin yesterday. Many a morn and eve have passed since it began—and now—is this to be the ending day of it ? And if this—by what manner of end ?

That is what Sandro's Fortitude is thinking. And the playing fingers about the sword-hilt would fain let it fall, if it might be : and yet, how swiftly and gladly will they close on it, when the far-off trumpet blows, which she will hear through all her reverie !—*Mornings in Florence.*

*Sandro, familiar form of Alessandro, Boticelli's christian name.

CRITICAL NOTES.

THE BASIS OF ECONOMIC VALUE.

TO obtain a stable and scientific definition of value has always been a great object with economists. Many definitions have been tried, but all have been found wanting in some essentials. If they cover the whole ground, they appear to be too vague and unscientific; if they are definite and scientific the range of application is too limited. The earlier definitions of value looked to an objective or external standard, rather than to a subjective one. Thus Adam Smith, recognising the distinction between value in use and value in exchange, says that exchange value is measured by the trouble of exertion which is required to obtain anything exchangeable, hence he considers labour as the standard of value; a standard still maintained by the socialists. Smith did not apply this standard very rigidly or define it too closely. Ricardo, coming after him and being of a more scientific turn, did apply the standard rigidly, making economic value depend entirely on labour, while the value of labour itself was made to depend on the cost of bringing efficient labourers up to the working age and maintaining their physical power. Thus was determined the famous "iron law of wages." Following the same rigid method, and accepting the Malthusian law of population, many other laws of a very pessimistic character were wrought out and claimed to be as immutable as the laws of physics; hence the epithet 'dismal science' applied by Carlyle. Public experience afterwards proved most of these laws to be quite mutable and in consequence Political Economy fell into considerable disrepute with the masses. A revision of the definition of value became necessary. J. S. Mill, if not the most original yet the most representative economist of the new period, following out a line suggested by De Quincey, changed the standard of value from the hard and fast basis of cost of labour to the flexible basis of relative power in exchange or the mutual influence of all the goods in a free market. Value in use and value in exchange, while quite distinguishable, were no longer so exclusive, for a wider meaning was given to *use*. Use value is the basis of all exchange value, but, assuming this, the really determining factor in exchange value is difficulty of attainment. This comes back to Smith's original ground, but it is with new light, for labour can no longer represent this difficulty. Individual advantage or disadvantage with regard to personal qualities, conditions of nature, artificial arrangements, or accidental circumstances all tend to decrease or increase the difficulty of attainment. The inadequate appreciation of these elements discredited the Ricardian theory of value and all the deductions from it. The same defect must render impossible all the modern

socialistic deductions from their theory of value on the basis of labour. Still the new theory of value as stated by Mill, was referred to an essentially objective standard—relative power in exchange. One of the consequences of the application of this new standard in a too rigidly scientific manner was the exclusion of the ethical element and the consequent denial that Political Economy is in any sense a moral science. But this strict separation could not be maintained, and was not regarded by those who insisted on it most strongly, as Mill and Cairnes. At present many economists are going to the opposite extreme and forgetting or denying that there is any distinction between economics and ethics. This has produced a great change in the standard and definition of value. The great point with the ethical school is not difficulty of attainment but desire and purpose. In fact the standard is no longer objective but subjective. The transition is at present in progress and is most advanced in Germany, and consequently in the United States. It is undoubtedly due in part to socialistic influence, socialists being particularly devoted to the consideration of what ought to be in the economic life, to the neglect of adequate inquiry as to what is or can be. But the ethical school of economists as distinguished from the socialists would fain be scientific; hence in trying to follow the ethical or purposive element in the determination of values, we have an elaborate balancing of pleasure and pains present and future, certain and uncertain, high and low, in fact a re-construction of the hedonistic calculus which involves the presentation of qualitative distinctions in a qualitative form. Now it is quite true that the pleasure which one derives from a fine picture or a well written book, and which is purely qualitative, may largely determine the price which one will pay for such things, but it gives no ground for determining with any accuracy worth mentioning, the amount of pleasure or satisfaction one gets for a given amount of money, or how much money one will spend to get a certain kind of pleasure. Yet so eminent an economist as Professor Marshall of Cambridge, claims that demand schedules may be made out for individuals and groups on this basis. In so doing he asserts to begin with that each several want is limited, which is true only of the simpler animal wants for a given time, but is wholly untrue of the distinctively human wants. Hence he is mistaken in saying quite generally that every increase in the quantity of a thing which a man gets produces a diminishing pleasure. His law of diminishing utility or pleasure, which is so very important in his theory of value, is, therefore, true only of the barest necessaries of life and is no general economic principle. The fact is, that while no man purchases anything without some purpose in view, the purpose has no definite relation to the price he pays for it,

neither has the pleasure which he derives from it any definite relation to the price. Purpose and pleasure or satisfaction, while indispensable to economic value, can be no standard for it. The standard is still relative difficulty of attainment, and must be sought not through physiological psychology or the hedonistic calculus, but through the actual experiments of the world's commercial life. Alter the world's fashions, pursuits, or ideals and you have altered many economic values, but still the standard is difficulty of attainment.

A. SHORTT.

THE BELL COLLECTION OF PAMPHLETS AND REPORTS.

THROUGH the generosity of Mr. J. Jones Bell, of Toronto, and Dr. Robert Bell, of Peterboro, the university library has recently come into possession of the very valuable collection of pamphlets, early government reports and other works relating to Canada, formerly in the library of their father, the late Robert Bell, of Carleton Place. Mr. Robert Bell was a son of the Rev. Wm. Bell who came to Canada in 1817, ordained by the presbytery of Edinburgh as minister to the presbyterians of the new Perth settlement, and who afterwards wrote a very interesting and valuable book on the country, entitled *Hints to Emigrants in a Series of Letters from Upper Canada*; the book was published in Edinburgh in 1824 and is now quite rare. The Rev. Wm. Bell was himself a collector of pamplets, mainly on religious subjects, and several of the rarest specimens in the collection of his son were from his library. His book shows that he was a gentleman of literary taste with a turn for careful and accurate observation, qualities which are the special characteristics of his descendants. His son, Robert Bell, was early interested in books and became an ardent collector. He seems to have carefully preserved every Canadian pamphlet which came into his possession during a long life. He was a member of parliament for about nineteen years, during the forties and fifties, when such interesting questions as the settlement of the claims arising from the rebellion losses, the abolition of seigniorial tenure in Lower Canada, the secularization of the Clergy Reserves and several interesting educational problems were occupying the attention of parliament and the country. He was thus in a position to obtain a great number of

official and semi-official publications with regard to these matters, all of which were carefully preserved and now form part of the collection which will henceforth bear his name.

Fortunately, too, his interests in records extended even to newspapers; his subscription list was unusually large, and every number was neatly and carefully filed. His collection included the *Daily Globe* from 1851 to the present time, the *Montreal Witness* from about the same date, and local papers from Brockville, Carleton Place, Lanark, Perth, Almonte and Ottawa. The files of the *Globe* and *Witness* form part of the collection which come to the university, and will become increasingly valuable as time passes, for they cover the most interesting period in our national development. Other elements of note in the collection are complete sets of the *Canadian Journal* and the *Journal of the Board of Arts and Science*, also the *Educational Journal* from its first issue. But the collection of pamphlets is undoubtedly the most interesting of all, especially from the historical and bibliographical points of view. As nearly as I have been able to determine, there are about thirty-five pamphets printed in Upper Canada before 1840 which are not at present known to exist in any other collection; though doubtless there exist other specimens of some of them which may yet be made known. In a future number of the QUARTERLY I expect to give a more detailed account of the rarer pamphlets with their titles. Among them, several were printed at Ancaster and Lanark before 1830, and others at Perth, Brockville and Carleton Place during the thirties. Taken in connection with the Snodgrass and Morris collections previously in the library, it is quite certain that Queen's has now the largest collection of early Ontario pamphlets anywhere to be found.

A. SHORTT.

CURRENT EVENTS.

THE Conference sitting in Ottawa is perhaps the most significant symbol that we have yet had of the width and strength of British sentiment. The first Conference was held in London, in 1887. When Lord Salisbury expressed the hope that it would be the first of a long line, no one dreamed that the second would be held in Ottawa. But when the Imperial Government declined to call a second, the Colonies took the matter into their own hands and the Mother Country accepted a place at the childrens' table. Great Britain, the Australias, New Zealand, South Africa, all send their accre-

International Conference.

dited representatives to meet, in what was a North American backwoods village fifty years ago, to consider affairs of common interest and Imperial importance.

Yesterday, the prediction of such a gathering would have been regarded as the utterance of a lunatic. But how often is the imagination of yesterday the fact of to-day!

Now that the Conference has convened from the ends of the earth, what will it do? Nothing spectacular, we may be quite sure. It has not met to draw up a Constitution or to make an Empire, but because the British Constitution is accepted and the Empire made, and it is felt that a sure basis thus exists for common action. The action may apparently amount to little, but one step at a time is a good rule. That Australians, New Zealanders, Afrikanders, Englishmen and Canadians are now here in Session, and that Ottawa is thereby at present in a sense the centre of the British Empire is in itself a fact of sufficient importance, to all who can see beyond their own noses, to entitle it to be called epoch-making. *Quod bonum, felix, faustumque sit!*

G.

NOTHING could be more amusing and occasionally instructive than many of the impressions which were made during the progress of the Coxey movement in the United States. Many professed to see in it the beginning of a revolution compared with which the French affair of a hundred years ago was a mere flash in the pan. Some divines saw in it the hand of God visibly stretched forth to deliver the poor from the tyranny of the rich. Able editors saw in it the possibility of getting cheap and interesting news by which they might turn an honest penny, and accordingly treated it with the awe and gravity necessary to that end. Many of that highly benevolent class of persons known as 'the friends of silver' saw in it a chance to do something for their hardly treated client; for was not Coxey in favour of 'cheap money and lots of it?' Many of the more unstable workmen, out of employment at the time, joined in the march for lack of other work for their idle hands to do, or with a Micawber-like hope that it might be the means of something turning up. The tramps fell into line on general principles. There were also no doubt many in the ranks who had an honest belief in the providential function of government, for which of course they can hardly be blamed, for have not the protectionists in the United States been preaching this doctrine to the working classes for the last thirty years? But when the advance party, under the leadership of the mighty Coxey in person, reached the Capital the general himself was soon in the hands of the common policeman and subjected to a very unromantic process of law for not respecting one of those paltry notices to 'keep off the grass'; as though a man with his head in the clouds could be expected to pick his steps. Moreover the very elements became unpropitious, and when the rain descended and the cold winds blew upon the defenceless Coxeyites for days and nights in succession, those of them who had homes bethought them-

The Coxey Movement.

selves of the poor fun they were having, and repented and turned back; while those who had no homes soon recognised that they would fare better while hunting singly or in couples for the customary shelter and provender of the tramps, as was their wont. Thus the hosts of Coxey melted away like the untimely snow, for they had no real grievance to redress, and no coherent principles, even if mistaken ones, to support. Nevertheless such movements may be dangerous, for if the low, ignorant, and inflammable elements of the population are allowed to assemble and march through the country after the fashion of the Coxeyites, they may become the tools of an abler demagogue than Coxey, and work much damage to law, order and property and cause much bloodshed before being suppressed. A. S.

The Times Letters on Canada.

THAT interesting series of letters on Canada, which appeared in the London *Times* during February and March, while reproducing many of the British stock notions with regard to our colony, is yet in many other respects quite above the average of such letters in information and appreciation of Canadian conditions. The writer evidently undertook his work with a purpose. His purpose was very friendly towards Canada; so friendly, in fact, that in reading the letters one is unpleasantly conscious of a predetermination on the writer's part to make out a good case for us at all hazards. There are two quite distinguishable elements in the letters. There is what the writer knew and was quite prepared to write about the country, before he came; there is on the other hand a good deal that he saw and learned during his stay here. The latter is the new and most valuable element; the former is pretty much the stock notions of a certain large, respectable and influential class of Englishmen who are regular readers of the *Times*. The character of this permanent substratum of idea with regard to Canada makes it quite evident that the country and its capacities are but slightly understood in Britain. This no doubt has something to do with the comparative lack of commercial interest in Canada which has hitherto characterized the British capitalist. The writer of the letters refers to this and seems to see in it nothing unnatural. After pointing out that the Canadian trade with Britain is not more than three per cent of the British foreign and Colonial trade, he says that Britain's interest in Canada is mainly a military one, and a good deal of his friendly efforts in our behalf is directed to showing how highly important we are to the mother country from this point of view. Much after the fashion of our own Mr. Parkin, he outlines for us the glorious destiny of becoming a sort of military store or base of transit and supplies, in men and materials, which will enable Britain to enter upon that great future struggle with the United States in order to protect her commerce, or, more specifically, to prevent the United States war vessels from capturing and destroying their own grain and cotton on its way to British markets, or the goods which are being imported by their own merchants in return for grain and cotton already sold. What

can be the meaning of the remarkable situation of our chief coal deposits on the Atlantic and Pacific coasts if not that an all-wise providence,—having a mind no doubt to see a first-class fight in the fulness of time,—did long years ago so dispose these coal fields as to insure some such result? While not insensible to the rational force of such circumstantial evidence, especially as worked out in detail by Mr. Parkin, one cannot help hoping that after all these gentlemen may be mistaken with regard to the divine purposes in this matter, and consequently with regard to the destiny of Canada. With regard to another point, intelligent Canadians must be getting tired of finding that so much of their country's claim to distinction rests upon the extent of its surface, that it is thirty-five per cent of the British Empire and so on, when they are conscious that it would be much better for them if three-fourths of that territory were a hundred fathoms under the sea. The remaining fourth would contain sufficient area and variety in soil, climate, mineral store, or other natural wealth to support an indefinitely large number of people and enable them either to fight the Yankees or attain to a high degree of civilization. But the *Times* correspondent discovered during his stay that our country had more than size and coal and the C. P. R. to recommend it, and finally tells the British public that the Canadians are beginning to have ideas of their own, and that the day when 'anything will do for the colonies' is nearly over. He is even under the impression that we are inclined to cull our immigrants. But let no immigrant be alarmed, for this inclination, if it exists in any hard heart, has not yet reached the tender affection of the government. In speaking of the C. P. R., he reverts to the old notion that being important to the military idea it must control our destiny. No doubt we have to acknowledge, in all honesty, that the C. P. R. has obtained in one way or another a very powerful hold on our country; but it is not a fact of which many well informed Canadians care to boast; at the same time it is not true that the C. P. R. has such an overwhelming grasp upon us that our whole future is bound up with it, as the writer of the *Times* asserts. There are several matters in which his lack of acquaintance with local conditions involves him in very curious statements. Thus he innocently quotes Mr. (now Sir Wm.) Van Horne as a chief authority in asserting the upright, virtuous character of the public dealings of the C. P. R. Again, when he wishes to give a special instance of the very liberal and far-sighted enterprise of the Canadian people he is so unfortunate as to hit upon the Chignecto Ship Railway. This he declares appears to him as in many respects a remarkable enterprise, as indeed it must to all those who know anything of its history. He speaks of it and its prospects at considerable length, and in quite a solemn strain, as though it might yet have some connection with the remarkable position of our coal mines on the C. P. R. He evidently believes that this railway was seriously intended to carry ships and is quite unconscious of its function in carrying elections. At the same time he is not without some knowledge of the situation in the maritime provinces, for he says that probably in no other part of the world

has so much effort been directed towards extracting prosperity from the political machine. Yet, notwithstanding the unconscious irony and subtle humour of the letters, their imported information and the evident desire of the writer to foster the reproduction on this side of the Atlantic of the European military curse, the letters contain many shrewd observations and offer some sound counsel to both Britons and Canadians. A. S.

Tariff Revision in Canada.

THE progress of tariff revision in Canada and the United States affords a striking object lesson with regard to the natural difficulties of that process. In the United States where the protection is greater, and where the infants undergoing the protective process are in the full vigor of manhood, the task is naturally more difficult than in Canada where the protection is lighter and the interests involved are not so overwhelmingly strong. In the United States, too, the Wilson Bill proposed a much more radical measure of reform than the very modest reductions, even as first reported, which are being made at Ottawa. The Wilson Bill, however, is practically a thing of the past, and something else to take its place is in process of formation somewhere in the realms of Chaos and Night. The Ottawa measure, after being in commission for about a year and a half, has evidently turned out to be of a very mild and cheese-paring character. There is a good deal of re-arranging of words and terms but a very limited reduction in protection. However, if a similar reduction were to be made each year for the next ten or fifteen years the Ottawa plan would be much the better, as it would give no shock to industry and would enable a large amouut of unprofitably employed capital to find more useful investments. It would also enable those native and natural industries which are perfectly able to support themselves to learn the freedom and independence of being 'off the parish.' We fear however that Messrs. Foster and Bowell are not likely to continue the good work, and are no doubt congratulating themselves on having got rid of tariff revision for another ten years. Indeed one cannot but sympathise with them, for the normal condition of a tariff reform is one of steady growth and development. To have checked this tendency and even reversed it a little is no slight acccomplishment. The wards of the government must indeed have been alarmed by the possibility of suffering worse things at the hands of their victims to have made what concessions we find. Here we have the difficulty of obtaining tariff revision at the hands of protectionists; in the United States we find the difficulties of obtaining it at the hands of professed tariff-reformers. The Democratic party is pledged, as a party, to lower the tariff, and there is little difficulty with the House of Representatives whose members were elected on this basis. But members of the Senate are not always elected on questions of national concern. To understand the composition of the United States Senate one has to study the special conditions of party and machine politics in each of the individual

States. Democratic senators are therefore not always sure to support the party's national policy. Moreover, the senators are found to be socially and commercially more nearly in sympathy with the limited class enjoying the fruits of protection than with the mass of people who furnish the fruits. The Senate thus becomes the special field of operations for those who are opposed to tariff reform. Those urging tariff reform have little to offer; they ask merely to be permitted to retain their own earnings. Those maintaining protection have many things to offer if successful, for what they ask is not their own but the right to levy taxes on others. It is not always safe, nor, in the estimation of those who value social distinction, always good form to offer hard vulgar cash as a convincing argument in favour of protection. But there are a hundred shapes and disguises which wealth may take in passing from one person to another. Politicians have families and friends, social aspirations and hobbies, whose interests can be advantageously placed in a fairly rational argument ending in what is called "a compromise in the general interest." There is nothing strange of course in all this; the only marvel is the calm indifference of the unprotected majority, vaguely conscious now and again that someone's ox is being gored, but each one trusting that it is not his and not knowing well how to find out whose it may be. A. S.

THE progress of discovery in electricity has been so rapid during the past fifteen years that it is possible only for the specialist to keep pace with it. It is within this period that electric lighting, electric railways, and the telephone have come into common use. The great discovery of Herz, that electricity is of the same nature as light and heat dates only a few years back; as also does Tesla's discovery of the wonderful properties of currents of electricity alternating with great rapidity. In Tesla's discovery there is a suggestion of a universe infinite and eternal with regard to its energy. Rapidly alternating currents of enormous tension can be discharged through the human body without injury, when currents of the ordinary sort flowing continuously would cause not merely instant death but extensive destruction of the tissues. We might live in a world of enormous electric energies without suffering any harm, provided the currents were always of the kind experimented with by Tesla. The destructive power of ordinary high tension currents is fortunately not very commonly experienced, so carefully are such currents insulated and guarded by the electrical engineers of to-day. In the museum of the Columbia School of Mines they show a dynamo of an older pattern which (according to the laboratory boy) was so fatal to meddlesome students that it was found necessary to replace it with one of a more modern pattern, so constructed that there was no danger of discharging the current through the body by touching the dynamo with the hand.

Recent Electrical Science.

Perhaps the most interesting recent application of electricity is to the production of high temperatures in the electrical furnace.

Moissan's electrical furnace, recently exhibited at a soiree of the Royal Society, London, is thus described in *Nature* (May 10th): "The furnace consists of a parallelopiped of limestone having a cavity of similar shape cut in it. This cavity holds a small crucible, composed of a mixture of carbon and magnesia. The electrodes are made of hard carbon and pass through holes cut on either side of the furnace, meeting within the cavity. "In this little furnace, by means of a current of electricity (600 amperes and 60 volts) a temperature of about 6300° Fahrenheit has been obtained, a temperature at which lime not only fuses but actually boils and passes off as vapour. M. Moissan has also succeeded in vaporising charcoal and causing it to combine with silicon so as to produce crystals resembling diamonds in hardness and lustre. Iron, at the temperature of the electrical furnace, dissolves large quantities of carbon, and when it is suddenly cooled by plunging it into molten lead, part of the carbon crystallises as small diamonds. It is quite probable that, in the near future, this process may be so perfected as to render easy the conversion of charcoal into large diamonds. The diamond would in this event become valuable not so much as an ornament but as material for the manufacture of boring, cutting, and grinding implements.

The electrical furnace promises to become useful in the reduction of metals from their ores. It has lately been applied to the production of aluminum directly from its oxide, and attempts have been made to use electrical energy as a source of heat for the reduction of iron. Since the beginning of this century, when Sir Humphry Davy made the first important discovery in electro-chemistry, and, working at moderate temperatures, prepared the beautiful and interesting metals of potash aud soda, no advance along this line has excited such keen interest as these high temperature experiments of M. Moissan.

W. L. G.

THE COLLEGE.

REPORT OF THE PRINCIPAL TO THE BOARD OF TRUSTEES.

For year ending April 25th, 1894.

NUMBER OF STUDENTS.

I HAVE much pleasure in reporting that the quiet and steady increase in our numbers, which has marked our history for more than twenty years, continues. The number of undergraduates in medicine shows a decrease, the reason of this being the fact that the Trustees of the Women's Medical College came to the conclusion last Autumn that it would be unwise to continue it in operation any longer, as women can now pursue their studies either in Montreal or Toronto, and as the total number is still inadequate to maintain even one teaching faculty in a state of efficiency. To give an opportunity to the women of Canada to obtain a medical education without expatriating themselves was their object from the first. Having accomplished this, and having had the pleasure of seeing Toronto and Montreal follow their example, they felt that it would be undignified to continue an unnecessary and wasteful competition. They resolved, therefore, to close the College and advise their students to betake themselves to Toronto or Montreal. Having gained the substance, they felt no desire to spend time and money in chasing the shadow. In consequence of this action, the undergraduates in Medicine now reported belong entirely to our own Medical Faculty. Notwithstanding this loss of one class, our total number of students this Session is 456 as against 444 the previous Session; viz.,

Undergraduates in Arts	258
Extra Murals in Arts	33
General Students in Arts	31
Post-Graduates in Arts	15
Undergraduates in Law	4
Undergraduates in Medicine	107
Undergraduates in Theology	27
	475
Or allowing for double registrations	456

DEGREES CONFERED.

At Convention, degrees in course were conferred as follows:—

In Medicine 18.

In Theology (5 Testamurs and 2 B. D's) 7.

In Law 3.

In Arts 44, of whom 27 Bachelors and 17 Masters of Arts.

The graduating class in Arts is by far the largest that Queen's has ever had. The reasons are that the class of 1894 was large and also

that many who belonged to 1893 took a five years course in order to try for first-class Honours and the Degree of A.M. This was anticipated in my last year's report.

In addition to the degrees in course, five degrees were conferred, *honoris causa*. The Senate thought the following personages worthy of this distinction and accordingly conferred on them the Degree of LL.D.;—His Excellency the Earl of Aberdeen, Governor-General of Canada; His Honour John Christian Schultz, Governor of Manitoba; J. Loudon. A.M., President of the University of Toronto; The Honourable H. G. Joly De Lotbiniere, Ex-Premier of the Province of Quebec; Charles Macdonald, C.E., New York, the eminent bridge-builder, and like Dr. Schultz, an old alumnus of Queen's.

SCHOLARSHIPS.

Perhaps no university in Canada, certainly not one of the leading universities, is so poorly supplied with scholarships as Queen's. We have some for matriculation, but scarcely one open to competition during any part of the undergraduate course. We had six known as "Foundation," but they were taken out of revenue and the Finance Committee have been obliged to discontinue them. What makes this regrettable is that few students of Queens are the sons of the rich. The fact that scholarships cannot be obtained during their undergraduate course prevents a number of promising young men from coming to Queen's, even when they are strongly drawn here by other considerations. His Excellency, Lord Aberdeen, has given us, in addition to the usual Governor-General's matriculation scholarship, another tenable for four years. I trust that others may follow his example, and I even take the liberty of pressing our lack on those who are older, but not truer, friends than His Excellency. If they communicate with me I shall be most happy to go more fully into detail with regard to the subjects of study that may most appropriately be selected, the amounts needed for establishing different kinds of scholarships, and other particulars. Last year, Her Majesty's Commissioners for the Exhibition of 1851 accepted our nomination of N. R. Carmichael, A.M., for their scholarship of £150 sterling. He is now pursuing his stndies in Johns Hopkins University, in Electrical Engineering, and the Senate has recommended him to the Commissioners for another year. We are fairly well provided with scholarships in the Faculty of Theology, but would be thankful if a few more congregations followed the example of St. Andrew's, Toronto, and St. Paul's, Hamilton, and linked their names with this Faculty in a way so appropriate and helpful to students of Theology.

SCHOOL OF MINES AND AGRICULTURE.

Since my last report, this School has become a reality, and work has commenced in the Mining department. The Governors hope before another year to open departments in Dairying, Veterinary and Navigation. Besides the annual grant from the Provincial Legislature, the Kingston City Council has voted the old Collegiate Institute property, valued at $20,000, for the use of the School; and the Governors

now intend to apply for grants in aid to the neighboring County Councils, and they have applied to the Dominion Government for assistance to the department of Navigation. Unless these applications are favorably entertained the School can hardly be permanent, but its success already has been so decided and its prospects of public usefulness are so great, that the municipalities are not likely to refuse a reasonable measure of assistance, while the department of Marine and Fisheries has long had the sanction of Parliament to assist in defraying the expenses of teaching Navigation.

The Governors of the School elected Dr. Goodwin as Professor of Chemistry, with the view of not being forced to compete with the University for students of Chemistry. It is important to them to get the largest possible revenue from fees. They elected, as their Professor of Mineralogy and Metallurgy, Mr. W. Nicol, M.A., who did good service as a lecturer under Dr. Goodwin, and whose term of service with us had expired. Having appointed a lecturer in Geology and Petrography, the Senate decided, in anticipation of action to be taken by this Board, that Professor Fowler should devote himself entirely to the subject of Botany. Students who desire to attend classes in Chemistry, Mineralogy or Geology, can henceforth take those subjects in the Mining School. As I have frequently pointed out before, the subjects mentioned can be equipped by the Mining School better than by the University, and at the same time its Governors secure by their action a large body of students. The University, on the other hand, though it loses fees, is relieved of two subjects or departments, one of which it undertook recently, and solely in view of the prospect of a Mining School being established.

PROPOSED FACULTY OF PRACTICAL SCIENCE.

The establishment of this independent School of Mining in Kingston has led the Senate to believe that the time has come when Queen's should organise a Faculty to give a theoretical, and, as far as possible, a practical education also, in the various branches of Applied Science. Some of our Students, as well as benefactors, at different times in various parts of the country, have pressed this on my attention, but the Senate felt that the resources of the University were inadequate and that premature extension would be unwise. The increase in the number of our students, the larger demand for professional instruction, and the recent bequests of Mr. Roberts and Mr. Doran, as well as the fact that the staff of the new School is willing to assist, all point in the direction of a movement along those lines that are so popular and so important in our age and in every new country. I submit the syllabus that the Senate has prepared, and call attention to the fact that Prof. Dupuis explained it yesterday to the University Council, and after he went over the proposed courses of instruction in detail, in order to show what we are already doing, and to point out what additional expenditure would probably be required, the Council passed a resolution, unanimously adopting the the scheme and pressing the necessity for immediate action on your consideration.

The object of this new Faculty being professlonal instruction rather than culture, it is proposed that the matriculation, as in McGill and Toronto, shall be confined poactically to Mathematics, and that a four years course shall lead to the Degree of Bachelor of Science, special mention being made in the diploma of the particular practical department to which the candidate has directed his attention.

Should the Board adopt the recommendation of the Senate and the University Council, a Dean must be appointed as head of the new Faculty. It would be well to request Prof. Dupuis, who is an expert on Mechanism and Engineering, to visit, between the months of May and October, the best Schools of Technology and Practical Science in Great Britain and the United States, and report to the Finance Committee what additions should be made to the staff and laboratories of the College; the Committee to have power to Act, up to a certain amouut, or within certain limits.

MEDICAL FACULTY.

Last year I had to report the great loss sustained by the University in the death of one of the ablest junior members of this revived Faculty, Dr. William H. Henderson. I am now called on to report the death of one of the ablest ot its senior members, Dr. Thomas R. Dupuis, a man beloved by his students for warmth of heart and geniality of disposition, as well as admired for remarkable powers of exposition. Both vacancies have been filled temporarily. The Nominating Board will probably meet soon to consider the matter and to determine what further changes, if any, have been rendered desirable in the Faculty.

After experience of the working of this Faculty as an organic part of the University, I congratulate the Board on the success of the step that was taken two years ago. There is manifest improvement all round; in the equipment for teaching, in the tone of the students, in the greater interest manifested in medical education by the graduates, and in the closer relationship of the Professors to the University.

During the past year, the General Hospital has been greatly improved by the addition of a new building, speciallly for maternity cases. I hope next year to be able to chronicle the erection of a modern operating theatre, to take the place of the small room into which the students have now to crowd whenever there are operations. We are doubly interested in the improvements that are being steadily made on the Hospital. They bear on the relief of suffering humanity and the University is directly concerned. We cannot have a first-class Medical Faculty without a first-class Hospital beside it, to which the students have free access.

I reported last year the receipt of $500, chiefly from the Chancellor, Professors and medical graduates, to pay for new apparatus needed in the laboratories of Professors Knight and Anglin. The Medical Faculty has recently appropriated the sum of $200, specially for bacteriological purposes; and Prof. Knight has received additional subscriptions for ayparatus, to the amount of $80, chiefly from medical graduates and Professors.

I would respectfully call attention to Prof. Knight's report herewith appended. Now, that some of the medical graduates are helping to equip the Faculty, others, I feel sure, will fall into line. They are no longer asked to aid a private school, but a department of the University, and to do so on that side which appeals to their sympathies and their professional instincts. Their aid will be most welcome, along any of the lines in which it is pointed out that we are still deficient.

FACULTY OF THEOLOGY.

This Faculty also needs strengtening. There is, indeed, an impression in the minds of some of our friends that it has been neglected, and that it has been starved, in order that the Faculty of Arts might be developed. There is no foundation for this impression. We could not have a Faculty of Theology at all unless we had a strong Faculty of Arts. The founders of the University drew no hard and fast line between the two Faculties. They knew that a thorough education in Arts was more important to Ministers of the Gospel than even professional education. At the same time, there is no intention of starving the professional Faculty. The General Secretary was instructed a year ago to collect specially for it and he has had a measure of success One benefactor, Mr. Hugh Waddell, South Monaghan, has promised $5,000 on condition that $20,000 more be raised. A Minister of the Church has promised $100 a year for five years, and a number of smaller amounts have been subscribed. An additional professor could be appointed if the sum named by Mr. Waddell were raised and if the General Assembly's College Fund were increased by an average of $1,000 a year, so that it would amount to the $4,000, considered necessary ten years ago, to pay our present staff. It is true that the Jubilee Fund was raised since, but the part of it that was eontributed for Theology went to endow Professor Ross's Chair, which had been started on the faith of subscriptions given for only five years. What is needed now is that the friends of theological education should co-operate with the General Secretary, Dr. Smith, with that heartiness and *esprit de corps* that has always distinguished them. I ought to mention, also, that he is physically weak, and therefore that volunteer assistance in his work will be greatly appreciated by him. He never spared himself when his health was good and that will now be remembered by some elect souls. His hope is that there are four men or women in Canada who will make up the $20,000 needed. I indulge the same hope and venture to ask, who shall be the first volunteer? Members of the Church have only to compare our theological staff, so far as numbers are concerned, with thatof Halifax, Montreal or Knox, and to remember that the same work has to be done, in order to understand our need for an additional Professor.

UNIVERSITY EXTENSION.

I reported at length on this work last year and have to state that it has been prosecuted since along all the lines then mentioned; first, with extra-mural students, guided by Professors or correspondence

tutors; secondly, by means of courses of lectures given, at the request of a large number of the most intelligent Kingston Mechanics, by Prof. Knight and other members of the staff; thirdly, by continuing the courses held in Ottawa, for two years previously, by Professors Shortt and Cappon; and fourthly, by the Theological Alumni Conference, held for ten days in the month of February, at the University.

A few words may be added with regard to the two last mentioned lines. Professor Cappon's class was the largest he ever had in Ottawa, a striking contrast to the down grade law which has generally ruled the University Extension movement elsewhere. It numbered over one hundred, and the members attended with great regularity. Few tried to pass the written examination at the close, because the aim of the great majority of the class is intellectual stimulus, guidance and improvement, without any desire that their progress should be exactly estimated and labelled or without any intention of taking a full University Course. Professor Shortt's class numbered forty-five, a larger number than attended the previous year. Their Excellencies, the Earl and Countess of Aberdeen, manifested an intelligent interest in the work, and the increased attendance this year is no doubt in part due to them. The amount of attention that any University can give to this department of Extension is strictly limited by the number of men on its staff. The "English Universities" can do a great deal, because they have so many fellows and other scholars who are glad to take it up. The Scotish or Canadian Universities can do very little, and it may be added—the demand is by no means so urgent in Canada as it is in England.

The Conference of the Theological Alumni was a great success this year, chiefly owing to the establishment of the Chancellor's Lectureship and the interest taken by all who attended, in Professor Watson's course of lectures on Dante. Profitable courses of study were also conducted by Professor Dyde on the evolution of Greek thought and by the Rev. G. M. Milligan on the Book of Job. The Evening Conference were stimulating and helpful. Papers were read, on the books that had been prescribed beforehand for reading, by Professor Ross, Reverends Dr. McTavish, J. Sharp, D. J. Macdonnell, J. A. Sinclair, R. McKay, and others. The alumni voted unanimously to hold a similar Conference next February. Information with regard to it can be had from their Secretary, Rev. John Young, A.M., Toronto.

BENEFACTIONS RECEIVED OR ANNOUNCED DURING THE YEAR.

The bequest of $40,000 by the late John Roberts, Ottawa, mentioned in last year's report, has been paid. The money has been appropriate to endow the Chairs of Botany and Animal Biology, the Executor of the donor, Mr. John Roberts Allan, generously adding a sufficent sum to enable this to be done. Of the Doran bequest, also mentioned in last year's report, $6500 has been paid in to the Treasurer.

The late John McLennan, By the Lake, Lancaster, noting before his death that there was a considerable deficit in our Revenue, forwarded to the Treasurer his cheque for $200, as a contribution to the

revenue of the year. There is no truer way of aiding the University than by gifts thrown into its general treasury in this voluntary and unostentatious manner.

I received a letter to-day from Walter R. Macdonald, Barrister, Hamilton, announcing that the late Mrs. Elizabeth Mallock (relict of the late Judge Malloch, Brockville, a tried friend and respected Trustee of Queen's in his day) had bequeathed the sum of $2000 for the purposes of the College, and intimating that the Executors were prepared to pay it on getting a Release in due form.

Nothing additional has been received during the year to endow the Sir John A. Macdonald memorial lectureship on Political Science, commenced by the Hon. Senator Gowan, LL.D.

Dr. Dyde has received promises to the amount of $1200 for a lectureship on Music. This matter is in the hands of a special Committee.

CONCLUSION.

I submit the reports of the Librarian, the Curator of the Museum, the Superintendent of the Observatory, and the Professors of Botany, Animal Biology and Physics. May I again put in a plea for a salary for a Librarian, so that Professor Shortt may be able to devote his whole time to his Chair?

G. M. GRANT, *Principal.*

REPORT ON PHYSICAL LABORATORY.

DURING the past year, besides fitting up the new laboratory in the basement, which has been a great comfort, I have purchased two pieces of apparatus for exact work, viz. a Torricellian apparatus to prove the laws of flow of liquids through different orifices and at different levels (£45), and a Kater's pendulum for determining the exact value of the gravitation—constant in the latitude of Kingston (£6). I have arranged with the makers, Negretti and Lambra of London, to spread the payment over two years. I have added, considerably, also, to the apparatus required for elementary laboratory work, and some apparatus for class experiments.

26 students out of 65 took advantage of the voluntary instruction in the laboratory. Miss Reid who assisted me during the past session did her work well, in spite of the arduous duties she had with Prof. Dupuis. The present arrangement of giving laboratory instruction only in the afternoons might be much improved upon, if it were possible to have an assistant all day in the laboratory. Most of the students could then take advantage of it, and put in at least two hours a week of laboratory work. This would be necessary if extension of laboratory work followed the establishment of a Faculty of Practical Science. Separate rooms for experiments in Heat, Light, and Electricity would be another desirable improvement. The latter two subjects require rooms which can be easily darkened. Indeed, part of the basement was shut off this winter for some experiments in Magnetism

which required a darkened room. Meanwhile I am glad to say that the room furnished last summer proved a great boon to the students, my assistant and myself.

Receipts, 1893-4—Balance	$ 173	85
From Treasurer (Apparatus fees)	309	00
From Mrs. Cornwall, for cyclostyle materials	1	00
Interest	3	18
	$ 487	03
Expenditure as per accompanying statement	405	99
1. iv. 1894—Balance in bank	$ 81	04

D. H. MARSHALL, *Prof. of Physics.*

REPORT ON BOTANY CLASSES.

The number of students who came up for examination was: Junior Class, 10; First Year Honours, 8; Second Year Honours, 4. Two others attended the Junior Class and one the Second Year's Honours, but failed to appear at examination. Having only the one subject I was able to meet with each Honour Class every day, and since the Christmas holidays have devoted three hours a day to them. We have consequently overtaken a much larger amount of work than ever before, one result of which may be seen in the very high percentages made at the examination.

When Dr. Knight was appointed to the chair of Animal Biology, I handed over to him the microscopes of my department, as they were nearly all constructed for dissecting purposes. As no grant for apparatus was made last April, I found it necessary to obtain from Dr. Knight two of the instruments which formerly belonged to my classes. But the use of only two microscopes for a dozen students necessitates a great loss of time, and the accomplishment of a much smaller amount of work than should be required. During the last few years great changes have taken place in the methods of Botanical study. Histology and Physiology have displaced very much of what was formerly taught, and every student now requires a microscope for his own special work. I trust the Board may see the necessity of furnishing the apparatus required by modern methods of study.

Last year the Board authorized me to collect Mosses and other Cryptogamous plants for Class use. Twenty-one days were spent visiting the different localities between Kingston and the Ottawa river, and though I discovered that this is an exceedingly poor region for Mosses, I secured a sufficient quantity of material to supply our wants for some years. Collections of marine and fresh-water Algae are very much needed. The fine collection of Lichens and Mosses presented to the Herbarium by A. T. Drummond, LL.B., will prove exceedingly valuable, as also the collection of Mosses by T. L. Walker, M.A.

The geological specimens formerly used in the Senior Science Class, and the case containing them, have been transferred to the Science Hall, and a new case of shelves is now required to contain apparatus, specimens, etc., at a cost of about $25.00.

The following expenses have been incurred and paid. Vouchers can be furnished to the Treasurer :

1893, Oct. 10,	Small pieces of Apparatus	$ 3 19
1894, Jan. 25,	Robertson Bros., account	3 75
Feb. 12,	Microscopic mounts	10 00
		$ 16 94

APPARATUS NEEDED FOR NEXT SESSION.

8 Microscopes, with accessories	$ 240 00
1 Hand Microtome and 2 Knives	13 00
1 Camera Lucida	8 00
2 Hand Magnifiers, No. 87, 1 Eye Piece Micrometer, 1 Stage Micrometer, Reagents, &c	9 50
Slides and Glass covers	5 50
Approximate amount	$ 276 00

JAMES FOWLER, *Professor of Botany.*

ANIMAL BIOLOGY.

The attendance in the junior class during the session was 7 ; in the honor class, 17 ; Extra-murals, 2 ; in histology, 36 ; and in physiology, 55. The total attendance, not counting any student twice, was 81. The decrease in the junior class may be due to the fact that the sub-division of chairs, having increased the difficulty of the honor courses in natural science, is deterring students from selecting honor courses along these lines.

In my last report I pointed out that the principle upon which I endeavored to carry on my work was, that the study of *form*, or anatomy should precede or accompany the study of function or physiology. This plan is the historical, and is followed by all the best teachers of biology. A man must understand the construction of a machine before he can understand its working. The same is true in biology. A student, whether in arts or medicine, must first understand the gross and minute anatomy of an animal before he can fully understand its physiology.

I have had no difficulty in shaping my work in accordance with this principle, in so far as the art students were concerned during the past two sessions. The action of the Medical Faculty in placing animal biology upon their curriculum will also enable me to give to medical students hereafter, elementary instruction in the comparative anatomy of both vertebrate and invertebrate animals, thus thus preparing them to understand the more elementary principles of physiology and general biology during the remainder of the session. The change will harmonize the work of the medical students with that in arts, and give unity to my work. I shall re-model my course in junior biology so as to adapt it to the wants of both classes of students.

The medical faculty has appropriated $200.00 for the purpose of supplementing our apparatus for teaching bacteriology. The teaching of this subject has in part been assigned to me. This and the practical work in biology in the junior class will entail additional

labor. I must therefore ask that ten additional microscopes be bought, so that the double time and labor which I have been expending on histology, through lack of microscopes, may be avoided. The small room at the south side of the medical museum should be set apart for work in bacteriology. because there is always more or less danger in cultivating and manipulating the micro-organisms of contagious diseases, and it would be unsafe to do such work in an ordinary biological laboratory.

In view of the fact that the first graduation under the extended curriculum (5 years) of the Ontario Medical Council will take place in 1896, it would be well for the University to develop her equipment for teaching pathology and physiology so as to offer to her graduates of that year, and succeeding years, an opportunity of completing in Kingston their final year in medicine. I believe that 8 or 10 of our graduates will want to do this post-graduate work. If they were charged a fee of $100 for laboratory privileges and assistance, the income would justify the erection of a new building, or an addition to the existing one—and solely devoted to research in physiology and pathology. Toronto and Montreal are preparing to offer facilities for such post-graduate work.

I have to acknowledge indebtedness to R. E. Sparks, D.D.S., for a pair of injection forceps; to R. M. Horsey, Esq., for a week's gratuitous instruction in taxidermy to my honor students, and to the Hon. J. M. Gibson, Provincial Secretary, and William Harty, M.P.P., for a valuable donation of a dozen copies of the Ontario Fish and Game Commission report to the laboratory library.

To Prof. Dupuis I am indebted for advice and assistance in many ways. His oxy-calcium lantern and lantern transparencies I used often last winter, and now that a dark room for photography has been provided, I hope to use the lantern still more extensively in teaching anatomy and physiology.

Prof. Virchow, who worked in our laboratory last May and June, sent me a few days ago a valuable little set of dissecting and histological instruments.

In conclusion, I beg leave to submit the following recommendations:

1. That the changes mentioned in my first report be made in the room used for histology, pathology and museum; cost $150.

2. That ten large new microscopes, and four small dissecting microscopes be provided; cost about $300. All the older large microscopes should be offered for sale to students at the close of next session.

3. That the laboratory lockers be provided with full sets of apparatus for the microscopic examination of fresh and prepared tissues, in view of the practical work to be hereafter done in the junior class. This apparatus, as well as the dissecting material, can be procured from the ordinary apparatus and laboratory fees

4. That additional apparatus, models and skeletons for teaching comparative anatomy and physiology be purchased in France or Germany, at a cost of $200.

5. That a glass cabinet, similar to one of those in the physics apparatus room, be procured, in which to keep the physiological apparatus bought last year in Britain.

A. P. KNIGHT,
Professor of Animal Biology.

THE MUSEUM.

In the department of geology and mineralogy a number of additional specimens of rocks and minerals have been added to the collection, and a number have been transferred to the School of Mining. My visit to Michigan last summer was not so successful as I had anticipated, owing to the fact that visitors to mining districts are not allowed to pick up anything of any value—everything, worth having, is secured by dealers or their agents and held for sale.

The cases in the Zoological department were emptied last Summer—backs put into them and the shelves painted. The specimens were all re-arranged and now present a much better appearance than formerly. Mr. R. M. Horsey very kindly undertook the work of arranging the birds according to the present ornithological classification, and also mounted a fine specimen of a hawk caught in the Science Hall. A fine collection of 25 bird skins, nicely prepared, was received from W. T. McClement, M.A., and a mounted hawk from the late David Nicol.

Former students have offered to procure specimens of bird skins, if the board would pay the expense of mounting. If the Curator were authorized to spend some fixed amount for this work our collection could be largely increased.

No additional mammals have been received.

At the last meeting of the Board I was authorized to procure a case for preserving insects. Shortly afterwards the Government Entomologist at Ottawa offered to make up for the College as complete an arranged collection as possible of the insect fauna of the Province, upon the condition that the College would pay for the case to contain them. This seems to me a much better arrangement, and I hope that the treasurer will be authorized to pay the bill when presented.

The Herbarium has been greatly increased in usefulness by the large collection of Mosses and Lichens presented by A. T. Drummond, LL.B., and a collection of 120 species of Mosses from T. L. Walker, M.A. A large bundle of plants was received last summer from the Agricultural College, Michigan, and another during the winter from the Missouri Botanical Garden, St. Louis, with the promise of another in exchange this summer. Nearly 1000 sheets have been mounted since last spring. The collections made by the Curator last summer furnished a number of new specimens.

Expenses during the year, $42.75.

Amount of grant last year, $30.00

The usual grant of $30.00 will probabably cover expenses this year, as no new paper or jars will be required.

JAMES FOWLER, *Curator.*

THE LIBRARY.

During the past year 726 volumes have been added to the Library from the following sources :—

Books purchased	576 volumes	
Books donated :—		
U. S. Government	13	
Dominion Government	17	
Ontario Government	20	
New Zealand Government	4	
Royal Society of Edinburg	3	
Institution of Civil Engineers	2	
Messrs. Macmillan & Co, London	25	
Dr. Jardine, Prince Albert	19	
Mrs. E. Drummond, London, Eng.	13	
Miss Penner, Kingston	11	
A. T. Drummond, Montreal	4	
Dr. McKay, Formosa	1	
Dr. Thompson, Sarnia	1	
E. R. Beuper	1	
W. W. King, Kingston	1	
Chas. Forshaw	1	
Miscellaneous pamphlets, etc	14	
	726	

RECEIPTS AND EXPENDITURE :—

Balance from last year	$ 142 42
Received from Rev. K. Grant, D.D., Trinidad	48 40
Received from examination fund for acct. paid	15 28
Regular receipts from the Treasurer	1261 00
	$1467 10
Total Expenditure	1322 64
Balance on hand	$ 144 46

Owing to the recent changes in the Tariff providing for the free admission of books for college libraries. our slender income will be saved the previous annual drain of $100 to $125. Still it is found that owing to the growth of new departments and the extension of work along several historical lines, the Library fund is totally inadequate to provide necessary working material. It would be very desirable if a special fund could be obtained to put the Library on a working basis with reference to some of the younger historical and scientific departments.

ADAM SHORTT, *Librarian.*

OBSERVATORY REPORT.

A course of Elementary Lectures on Descriptive Astronomy has been delivered during the past session by Professor Dupuis and myself to the Junior Class in Physics, and essays and examinations on the subject have been required from the students. A larger Senior Class than usual have been at the same time instructed within the Observatory itself in the practical applications of the science and the use of the instruments employed.

The different instruments have been kept in good order, and it is proposed duriug the summer to make some important additions to their equipment. I have every reason to be satisfied with my assistant, Mr. S. A. Mitchell.

JAMES WILLIAMSON,
Director of Observatory.