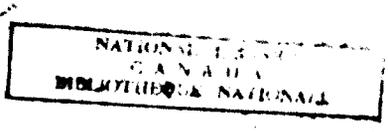


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QUEEN'S QUARTERLY

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VOL. VI.

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EVOLUTION IN RELATION TO CHRISTIAN THOUGHT.

READ BEFORE THE MEETING OF TRINITY COLLEGE ALUMNI, 12TH
JANUARY, 1898.

THE history of Philosophy is the history of humanity's persistent efforts to solve the great Riddle of Existence. "To the mind as it develops in speculative power the problem of the Universe suggests itself. What is it? and whence came it? are questions that press for solution... ..To fill the vacuum of thought any theory that is proposed seems better than none."⁽¹⁾ In obedience to this impulse the earliest investigators bravely set out upon the quest with their five senses for their sole equipment. With these appliances discoveries were made, and the region of the things known began to be mapped out. But the region that lay beyond was limitless. In constructing the map of the sum of things those sections which had not been explored were filled up by conjecture. The origin of all things was air, was fire, was water, according to the scheme of each several adventurer in the realms of mystery.

The efforts of the investigators were rewarded from time to time by additions to the territory of the known; and so the map required continual reconstruction. Yet, withal, the mysterious, undiscovered country loomed as limitless as ever. But at length the explored area becomes so vast that a division of work takes place: the special departments of Physics and Metaphysics—or of

1. H. Spencer. *First Principles*. Part I. ch. 2. sec. 10.

Natural Philosophy and Speculative Philosophy—fall into different hands; and so begins the kingdom of Science, which rules over Physics. The vast stretches of the unknown are claimed by Metaphysic as her sphere of influence: the deeper mysteries—those of Life, Mind, Consciousness, and of what was called the “Immaterial”—being left to her control.

But Science ever adds to her domain. She constructs appliances to aid her five senses. The lens is used to magnify the things small, to bring closer the things far off: and lo! two new worlds are now within her scope; the world of the infinitely great, and the world of the infinitely minute. As her empire extends she divides and subdivides her possessions into special sciences which increase and multiply until, to-day, the number of the various 'ologies seems beyond count.

It is not to be wondered at if Metaphysic grows uneasy the meanwhile: for the religious sentiment is a largely controlling factor in her constitution. We can allow for the spirit in which at one time she might say to Science: “You may measure the distance of the stars; you may calculate their motions; but you can never tell what they are made of!” And then came the spectroscope to the aid of the astronomer collaborating with the chemist, till at length Science could boast, “I do know what the stars are made of!” And so, in the border-land of the known and unknown, pass after pass, and fort after fort, and province after province, were captured by Science; while Metaphysic retreated within the region of the “Immaterial” and to her fortress of Psychology, where she deemed herself in secure possession.

But Science presses on. The old philosopher said: “Give me $\pi\omega\beta$ $\sigma\tau\omega$ and I will move the world.” Modern Physiology says, “Give me one speck of protoplasm and I will construct all animated nature.” And when Metaphysic retorts: “Aye, but that speck of protoplasm is living, and life, with all its mysteries, is beyond your reach,” then Science advances to the attack again. Formerly, with her scalpel exercised on the dead body, she discovered much; now she uses it on the living organism, and in her audacity exclaims, “Only give me the due proportions of C, H, N and O, and the proper conditions of atmosphere and heat, and I doubt not I will yet make that speck of protoplasm!”

The conflict, waged so long and often so bitterly, seems of late to be drawing to a close. A truce is proclaimed. Metaphysic seems to be less influenced by her old-time counsellor, Religion, and making terms with Science: and even the fortress of Psychology is now under the joint occupancy of the two powers. As a result of the compact Synthetic Philosophy, in the *magnum opus* of Herbert Spencer, has presented a grand and unique system—a nobly executed map of the Sum of Things, with every part of land and ocean outlined—save around the poles.⁽²⁾ We are invited to behold the Universe under one and the same law of Evolution in all its infinite permutations and combinations: one stupendous mechanism with all its parts, organic or inorganic, suns and stars or specks of dust, subject to the joint law of the conservation of matter and the conservation of energy; one vast and ever-spreading network of life from monad to man; and even man himself, possibly, but a link between the past and some coming race,⁽³⁾ which, even if this little planet never lives to see it, may be existing now in some of the multitude of globes around us. For Philosophy says to man:

“This truth within thy mind rehearse,
That in a boundless universe
Is boundless better, boundless worse.

Think you this mould of hopes and fears
Can find no statelier than his peers
In yonder hundred million spheres?”⁽⁴⁾

So we see that Philosophy itself, like all things else, has been subject to the law of Evolution, developing from a vague, incoherent, homogeneous beginning to a highly complicated and yet coherent state of thought: and it looks forward to further developments, and doubtless imagines it may yet forecast the

one far-off divine event,
To which the whole creation moves.

2. “Positive knowledge does not, and never can, fill the whole region of possible thought.” *First Principles*, sec. 4. See also chap. 3, sec. 21, *Ultimate Scientific Ideas*.

3. See Helmholtz' Lecture on *The Origin of the Planetary System*.

4. Tennyson. *The Two Voices*.

II.

But, after all, what is that far-off divine event? And to what extent has philosophy solved the great riddle? Science has discovered to us the grandeur, the vastness, the infinity in unity of the machinery of the Universe. But whence came it? Who designed it? Who controls it? What is the purport of it all? Philosophy is unable to reply, and stands overawed in the presence of the "inscrutable Power that is manifest in the Universe." But let us acknowledge that even in this direction we have to thank her for her achievements. She has cleared the mind forever of the idea which haunted the ancients, that there were many powers, rival powers, powers in eternal antagonism, of whose hostilities and caprices we were the victims. Polytheism has been for ever overthrown by philosophy. She has cleared the mind, too, of the idea which possessed later thinkers, that there must be two antagonistic powers—of Good and of Evil—and that all that is left to us is to

"Trust that somehow good
Shall be the future goal of ill."

Such dualism has been overthrown for ever by the philosophy which exhibits the Unity of Nature amid all this infinite diversity. But the "inscrutable Power"—the one Power, in all its diverse manifestations—What is it? or Who is it? or *Whose* is it?⁽⁵⁾

Mr. Herbert Spencer declares at the close of his researches, with much beauty and dignity of language, that "amid all the mysteries that become the more mysterious the more they are thought about," man is conscious of this, that he is "ever in the presence of an Infinite and Eternal Energy from which all things proceed."

Thus, then, Philosophy—after all her centuries of effort, her brilliant achievements, her invaluable accumulations of knowledge—when brought face to face with the Ultimate Reality, confesses her agnosticism, that is to say, her incompetence to

5. Mr. Matthew Arnold in *Literature and Dogma* tells us that all that we can positively know is that it is "a Power, not ourselves, that makes for righteousness," and bids us rest content with that. "Vacant chaff well meant for grain."

solve the Great Riddle; and in her more anxious moments is ready to cry :—

“ I falter where I firmly trod,
 And falling with my weight of cares
 Upon the World's wide Altar-stairs,
 That slope through darkness up to God,
 I stretch lame hands of faith, and grope,
 And gather dust and chaff, and call
 On what I feel is Lord of all,
 And faintly trust the larger hope.”

III.

But all this time, through the past nineteen centuries, while human wisdom has been thus developing, there has existed a distinct and independent agency for informing men concerning that which is the essential part of the great problem, viz. : our relations with what philosophy calls the Unknowable, Ultimate Reality, and religion calls God.

This particular agency—the Church of Christ—has been all that while delivering her message, preaching her gospel. That gospel or message is—not that she has elaborated a new and complete system of philosophy, but—that certain events have occurred. She does not profess to “understand all mysteries and all knowledge ;” but she does profess to have some special information to impart. She declares, not that she has found God, but that God has found her, has brought her into being and entrusted her with a special message to men.

Now this declaration of hers is either false or true. If false, then let her perish, message and all ; and let us all realize that there is no outlook for us save what we can guess out of the riddle of existence. Let philosophy go on busying herself with her abstractions and her antinomies, ever extending her parallel lines in the hope that they may some day meet : let her “reason high” of the Unknowable, the Absolute, the Unconditioned,

“ And find no end in wandering mazes lost.”

But, on the other hand, if the Church's message is true, we may be sure that it will fit with all that is true in philosophy and science. Anyway, as long as she exists she must go on delivering that message. To water it down, to vaporize it and sublimate

it, till it may mean anything at all or nothing at all, is simply a confession of failure.

Now what is the special message which the Church is commissioned to deliver? It is, as we have said, a statement of facts, of certain historical events. One of her earliest messengers thus formulated it :

"In the beginning was the Word, and the Word was with God, and the Word was God.....And the Word was made flesh, and dwelt among us."

And he adds elsewhere, and reiterates :

"This is the testimony, that God gave unto us eternal life, and this life is in His Son." "These things have I written unto you..... that ye may know that ye have eternal life."⁽⁶⁾

The special message, then, which the Church exists to declare is what we know as The Incarnation. Of course this involves all such events connected therewith as the birth, death and resurrection of the Incarnate Word: events which happened in a way not in the ordinary course of nature, and which from the very nature of things we cannot expect to be repeated, but the results of which are permanent and eternal.

The Church has ever fulfilled her commission. From the days of St. John to those of the Nicene Council, her divines always set forth the fact of the Incarnation: and from the days of that Council unto our own, the Church in her Nicene Creed—her *articulus ecclesie*—has proclaimed at every celebration of the Divine Service that Jesus Christ, "*Deus de deo.....homo factus est.*"

IV.

But there was always a danger of the Church exceeding her commission. It was natural, it was indeed right and proper, that her theologians should not rest content with merely stating the facts, but should exercise their minds in elaborating a philosophy of those facts, in propounding the rationale of the Incarnation. But we must clearly distinguish between their schemes and the Church's message proper. Their office was to "justify the ways of God to man": the Church's business was, and is, to declare the ways of God to man. The Church had proclaimed for a thousand years, "*Deus homo factus est,*" before S. Anselm

6. S. John I. 1, 14; and I John V. 11, 13.

wrote his treatise, "*Cur Deus homo?*" Previously to Anselm S. Augustine and others, and subsequently to Anselm the various schoolmen, propounded each his own theory of the rationale of the Incarnation (or as we usually phrase it, the "Plan of Salvation," each theory differing in some points from its predecessors or contemporaries, until there appeared the conflicting theories of the two famous rival doctors, S. Thomas Aquinas and Duns Scotus, to whom we shall refer later on.

All these schemes were naturally coloured by the philosophy of the day. Each theologian strove to extract what he deemed "the soul of truth in things erroneous"⁽⁷⁾ of the systems in vogue among the thinkers of his time. So did St. Paul, when he pointed out to the men of Athens that they were worshipping a God confessedly unknown, and added, "Whom therefore ye ignorantly worship him declare I unto you." So did St. John; living in his old age in Ephesus, among people well acquainted with Philo's doctrine of the Logos, he extracted that "soul of truth" from among the "things erroneous" of the famous Alexandrian, and embodied it in his message when he told us of

"The Heavenly Word proceeding forth
Yet leaving not His Father's side."

And so did the succeeding apologists of the Church, each taking what he conceived to be the "soul of truth" in Greek and Alexandrian philosophy and adapting it to the message which the Church had to deliver.

As science developed, it became necessary that theology should rectify her schemes in accordance with the new learning. She was slow to do so, we admit. That she long resisted, and often with bitterness, the new pronouncements of Science, is not to be wondered at. It is human nature, and especially metaphysical human nature, to hate to have one's notions and ideas upset. Yet many scientific writers of to-day make great capital out of this. Mr. A. D. White's learned and most interesting work, *The Warfare of Science with Theology*,⁽⁸⁾ and Dr. Draper's

7. See the opening sentence of *First Principles*.

8. *The Warfare of Science with Theology in Christendom* by A. D. White, LL.D., etc., in two volumes. New York: D. Appleton & Co. In this work the author heaps up every bitter word or hostile act of which Theology was guilty through the centuries. And very sad reading it makes. It should humble us to

well-known book, *The Conflict Between Religion and Science*, are instances. The late Professor Huxley once said that "extinguished theologians lie about the cradle of every science, as the strangled snakes around that of the infant Hercules." They do, no doubt; but so do extinguished scientists and extinguished philosophers lie around the cradles of later born wise men.

If the Copernican system of astronomy had been in vogue in the 4th century, no doubt the fathers of the Church would not have written many things they did write, but that would not have affected their faith in the Incarnation. For the Church was not founded to anticipate science, nor to do away with the necessity of men using their faculties in their search for knowledge.

Theology, then, like every other science, is capable of development, and theologians, like other mortals, may rise on stepping-stones of their dead selves to higher things in accord with the learning of the day; although the original deposit of the "Faith which was once for all delivered to the saints" must remain ever the same. While insisting upon this the Church does well to allow ample room to her theologians to ventilate the question, "Cur deus homo?" If she ever dogmatically asserts the scheme of such or such a doctor to be the only absolutely correct one, she exceeds her commission, she is acting *ultra vires*, and is sure to come sooner or later into collision with science, as alas! she has too often done.

v.

And now for the question, How is Theology affected by the new learning of to-day? What direction should Evolution give to Christian thought? At the outset let me lay down two propositions:

1. Evolution is now too thoroughly established to be resisted or ignored by Theology; and

see how constantly theology strove to divert or stem the advancing tide of science. But it is well to "see ourselves as others see us;" it may prompt us to avoid, in these days of enormous increase of knowledge, the Church's obscurantist policy in the past. As a corrective to the unpalatable diet, I would recommend the noble words of Mr. H. Spencer in the 5th chapter of Part I of *First Principles*, especially the 32nd section, which closes with the words, "And so we learn that theological conservatism, like political conservatism, has an all-important function."

2. Evolution has entirely reversed our whole view of things. It has revolutionized all philosophy.

1. Let us fully understand that Evolution is a philosophy of the whole, and not a doctrine of one particular branch of science. It affects Astronomy, Chemistry, Geology, Philology, Ethnology, Sociology, Psychology, as well as Biology. It does not mean simply and solely that man is the product of some tailless monkey. Darwinism is an important factor, but it is only one factor elucidating one phase of the general law. In the words of a great thinker of the day: "We regard the law of evolution as thoroughly established. In its most general sense, *i.e.*, as a law of continuity, it is a necessary condition of rational thought. In this sense it is naught else than the universal law of necessary causation applied to forms instead of phenomena. It is not only as certain as—it is far more certain than—the law of gravitation. The day is past when evolution might be regarded as a school of thought. We might as well talk of gravitationist as of evolutionist."⁽⁹⁾

2. Evolution has entirely reversed our whole view of things. To be sure every great discovery revolutionized in measure the previous philosophy, and startled and exasperated the devout upholders thereof. The Copernican astronomy, in shifting the whole world of thought from a geocentric to a heliocentric view of things, must needs have given it an awful wrench. The Church stoutly resisted, we know, but she got bravely over the shock. Newton's discovery of gravitation, too, created a similar revulsion. The seniors among ourselves can remember what searchings of heart were caused by the conclusions of Geology as to the antiquity of the earth and of man. But to-day the students of our Universities and High Schools are taught these things as matters of course.

But far beyond these great departures has Evolution modified, I might say overthrown, the old philosophy. We see its very foundation changed, its dominant idea reversed. That reversal I would express in this way :

9. *Evolution and its Relation to Religious Thought*, by Professor Jos. Le Conte. New York: D. Appleton & Co. Part III, chap. 1. It is well known that leaders of thought in the Anglican Church, *e.g.*, the Archbishop of Canterbury and the authors of *Lux Mundi* accept Evolution.

1. From the dawn of Greek philosophy to our own day the dominant idea was, There is something lost which we are seeking to recover.

2. From now henceforth it will be, There is something never yet attained towards which we tend.⁽¹⁰⁾

The idea of "something lost" pervaded all Greek thought. We trace it in the legends of the Golden Age, of the departure of Astræa, of Demeter and Proserpine, of Prometheus and Pandora, and many others. In fact all mythology, both Aryan and Semitic, was full of it. Even Plato's doctrine of the Immortality of the Soul was based on the idea of its pre-existence, and that idea was based on those "reminiscences" which flash across the minds at times as if they were faint memories of some departed, and generally happier, state of existence. Now-a-days the scalpel of the vivisector has enabled him to account for those "reminiscences" in a much more prosaic way.⁽¹¹⁾ And the whole structure built on the fancy—whether mythological or philosophical—of "something lost" has toppled over, under the pressure of Evolution as displayed in Geology; for there is no place in its records for any Golden Age.

VI.

"But," says the critic, "if the doctrine of 'something lost,' the doctrine of the Golden Age, must go, the Biblical story of the Fall must go with it; and if the doctrine of the Fall goes, the Christian doctrine of the Atonement must go with it." And we are recommended to throw over the Old Testament, as being only a "mill-stone around the neck of Christianity."⁽¹²⁾ Our answer is, the Old Testament is not a mill-stone round the neck of Christianity, *if properly used*. If we read the Old Testament as we ought to read it, as a record of the gradually increasing light vouchsafed to Israel, beginning as a talk to those who were mere "children in understanding," and becoming more and more advanced in its teaching through the fifteen hundred years of its compilation; if we erase from our minds everything we

10. I beg to refer to an article of my own, *The Old Theology and the New Philosophy* in *The Open Court*, Chicago. December, 1895. No. 433.

11. In Dr. Draper's *Conflict between Religion and Science*, p. 132, they are called "vestiges of ganglionic impressions."

12. *Guesses at the Riddle of Existence*, by Prof. Goldwin Smith.

have read into it from the classics, we shall find the Old Testament not a mill-stone round the neck of Christianity; rather it will prove the ballast for the Ark of Christ's Church. But we must throw overboard a good deal in the matter of mediæval accretions to the ancient deposit of the Faith. In extracting the "soul of truth from thing erroneous," the fathers often pulled up with it a good deal of the mould of crude pagan thought; and it would be interesting to study its accumulation in theology.

We have said that the Ante-Nicene divines dwelt upon the fact of the Incarnation. "Deus homo factus est" was their theme; and they were mainly occupied in defining the terms, so to speak, of that proposition. From the Nicene Council onward the fathers undertook to answer the question, "Cur deus homo?"⁽¹³⁾ And I think we shall find that from S. Augustine to Anselm, and from him to S. Thomas Aquinas, the "Plan of Salvation" was made to depend more and more on the doctrine of a primeval state of perfect bliss, which was lost by "man's first disobedience." The outline sketch, in the first three chapters of Genesis, drawn with a few bold strokes by an Oriental hand, and therefore steeped in Oriental idealism and symbolism, was filled in and touched up and coloured by successive artists of the Post Nicene and Mediæval schools, with material drawn from classic sources, until at last a completed picture is given us in that wonderful poem of Milton's—that sublime blend of Hebrew Scriptures, Homer, Hesiod, and Ovid's metamorphoses—which he named Paradise Lost.

Now this idea of a Paradise Lost is irreconcilable with the new learning. Paradise must be looked upon, not as something to be "Regained," but as something not yet attained towards which we tend.

And be it observed that the Holy Scriptures lay no such stress as does the conventional theology, on the idea of a primeval Golden Age. St. Paul does indeed speak of our sinful and mortal state as inherited from the first Adam; but that is a fact—a scientific as well as theological fact—which there is no dis-

13. Draper's *Conflict, etc.*, chap. II. Archbishop Thompson on *The Death of Christ* (Essay VIII in *Aids to Faith*). *The Catholic Doctrine of the Atonement*, by H. N. Oxenham; introduction and chaps. 2 and 4.

puting, and that statement is quite compatible with an evolutionary, instead of a catastrophic, interpretation of Genesis. St. Paul never alludes to a primeval state of perfect bliss, which was lost. Indeed the idea of something lost is foreign to the whole New Testament theology, whether "Pauline" or "Petrine" or "Johannine;" but the New Testament is fairly saturated with the idea of something never yet attained towards which we tend.

The last among the scholastic theologians to develop this "Plan of Salvation" was S. Thomas Aquinas; but there was a rival system propounded by that sturdy Briton and Oxford Professor, Duns Scotus. Among the hair-splitting metaphysicians of those times, the question naturally arose: What if Adam had not disobeyed? Would the Incarnation then have taken place? "No," said Aquinas, "it would have been needless." "Yes," said Scotus, "the Word would have been made flesh all the same, in order to raise man to a still higher level; to impart the vital principle of a still higher life." The Scotists were on the right track, in this matter at all events. And if we read our Bibles in the light of modern thought, we shall see that this is its teaching throughout. The Christ comes to give to man something never yet attained. And what is that?

VII.

Science tells us that there has been an evolution of life, a gradation from the simplest organic form to man. The Old Testament recognizes every such life—*human life included*, be it noted⁽¹⁾—as נֶפֶשׁ חַיָּה in LXX ψυχῆ ζῶσα. This "Life" is therein attributed to the Spirit of God, whom we acknowledge in the Creed as the Lord, the Life-giver—the Giver of all grades of life—organic life, animal life, human life, intellectual life, ethical life, spiritual life—and there the Old Testament stops. But in the New Testament the Incarnate Word says, "I am come that they may have life, and that they may have it abund-

14. In the English versions—both authorized and revised, of Gen. II. 7, we read, "Man became a living soul." The term "nephesh chayah" is rendered "living soul" in this verse alone, although precisely the same term had been predicated of every beast and fowl and fish, and "everything that creepeth upon the earth," in the first chapter. Evidently this was done by our translators in order to differentiate man from other creatures. But the original does not so differentiate.

antly." This "abundant life" is called throughout the New Testament by a new name⁽¹⁵⁾—"Eternal Life." In Preb. Sadler's *The Second Adam and the New Birth* and his other works, this thought of the gradation of life is worked out. The passage, I. Cor. xv. 45-50, read in the original shews more strikingly than any translation can do, the antithesis between the "psychic life," which is *inherited* from the first Adam, and the higher life which is *imparted* by the second Adam.

As to the nature and potentialities of this Eternal Life, "eye hath not seen nor ear heard, neither have entered into the heart of man to conceive the things which God hath prepared for them that love Him." The Lord before His sacrificial death said, "In my Father's house are many mansions: I go to prepare a place for you." What is the Father's house? Surely the whole boundless Universe! And where are its many mansions? Why, all around us, wherever the eye, aided by the telescope, can reach—those "hundred million spheres," the "multitude of the heavenly host which no man can number," compared with any one of which our little earth is but a speck.

What an infinite field has Science opened out for the roaming of Christian imagination! which, nevertheless, cannot lose itself so long as it is tethered to that pillar of the truth, the Incarnation of the Word, and finds its resting-place on His assurance and His promise—"I am the Way, the Truth and the Life; no man cometh unto the Father but by me." "And this is the promise that He hath promised us, even Eternal Life."

G. J. LOW.

15. It only occurs (in the Old Testament) in Daniel XII. 2. and in 2 Maccabees VII, 9 and 36.

SKETCH OF THE GROWTH OF THE EPISCOPATE.

II.

WE saw in last number how great a gulf separates Paul's theory of the Church from that of Irenaeus and Cyprian. Paul's ideal and invisible Ecclesia has become a perfectly palpable external organisation. The free gifts of the incalculably operating Holy Spirit have changed into legal offices. They are now the official perquisites necessarily attached to a flawless installation called ordination. An ecclesiastical hierarchy has intervened between man and God as the indispensable channel of communication. The Church essentially consists of its magistrates; the laity are an inert mass, passive recipients of truth and salvation. They are expected and required merely to shut their eyes and open their mouths as it were. The original universal priesthood of all Christians has been confiscated in favour of a governing class.

This whole externalising process has consummated itself in connection with the growth of the episcopal power. The history of the Episcopate is the history of the crassification of Christian ideas. We will now glance at the chief stages of the evolution.

The imposing Sovereign-Bishop and High Priest of Cyprian was, like many other great men, the descendant of very humble progenitors—the son of poor, but honest parents. About the year 60 A.D., in the letter to the Philippians, we hear for the first time of certain officers called *ἐπίσκοποι*. They are evidently a sort of board, or committee. The fact that they first appear on Pagan-Christian soil and the kind of qualifications consistently laid down as proper to belong to them lead to the suspicion that they were originally borrowed from those private associations or clubs which play so large a part in the social life of the Graeco-Roman world at this time. At any rate it is plain that their primary duty was the control of Church finance, and that they were not at first specially identified with the most important and highly-esteemed function of the early Church, the ministry of the Word. That was the province of Apostles, Prophets and Speakers in Tongues; the men endowed with the *charismata*

of inspiration. Compared with these, in a society so predominantly set upon purely ideal aims as the early Christians, the Bishops, with their sober, practical gift of looking after matters of business, naturally occupied an extremely humble place. In such a society, however, it must be remembered on the other hand, even the most commonplace duties were lifted into a higher region by an all-pervading spirituality. The property managed by the *Episcopoi* was "the household of God;" they were "God's stewards;" and, moreover—a fact of immeasurable significance for their future—they were thus brought into direct connection with the most sacred and mysterious act in the whole Christian cultus, the celebration of the Eucharist. For the Church goods administered by them were the free-will offerings of the faithful, a sacred oblation solemnly offered up to God and consecrated with prayer—prayer and gifts being the only sacrifices recognised at this time—and thus transformed from their coarse material substance into the aliment of the spiritual life. The Christian love-feast was in the highest sense of the word a "convivium," a fellowship in living to God. But this beautiful and characteristic conception that even the physical life of man has been redeemed in Christ and is in Christian society raised to a higher plane as the vehicle of the spiritual life, its very nutriment, "wretched food and drink," transmuted into the texture of the immortal nature; the mystic idealism of this thought was peculiarly liable to degenerate, as it did not fail to do, into a crass external dogma of bloody sacrifice, and of course the more such superstition gained ground the higher rose the importance of those associated as ministrants with the mysterious rite. It was a circumstance of all-inclusive moment for the growth of the Bishops' power that they were from the very first closely connected with the single ceremony of the Church which contained the germs of unlimited development in the direction of sacerdotalism and superstition. At first, however, the decisive act of consecrating the elements did not fall to the Bishops. They merely collected, and with the help of the deacons, an ancillary class of officers who are in a very significant way regularly associated with them, distributed the offerings of the Love-Feast and Eucharist to the guests at the Lord's Table, and the surplus to the recipients of Church bounty. But in the presence of an

Apostle, Prophet, Teacher, or even Confessor, the Bishops were originally dumb. It was those who spoke the prayer which gave a new character to the fruits of the others' collecting industry. Only in their absence did one of the Bishops venture to take their place. And, as we learn from the *Teaching of the Twelve Apostles* (about the end of the first century) while Prophets and Teachers spoke as the Spirit prompted them, so small was the endowment in this kind expected from Bishops, that they were bound down to a regular form of prayer which this treatise prescribes. From this it is plain that the presidency of the Eucharist, the most distinctly priestly function of the early Church, was conceived as necessarily going along with the charismata of teaching, and that the Bishops were at first not at all or in a very faint degree credited with that charisma.

However, the same treatise plainly shows that at the time when it was written (about the end of the first century) the gifts of inspired teaching were already on the wane. It may easily happen, we find, that no Apostles or Prophets are to be had. In that case a makeshift substitute is to be found in the board of Bishops. The writer intreats his correspondents not to despise their Bishops, because, after all, they do discharge the services of Prophets and Teachers. We see, then, that the cooling down of the first enthusiasm in the Church has a two-fold effect in favour of the humble local officials of each community; first, they become the only commonly available persons for the discharge of the highest functions, the ministration of the Eucharist and Teaching; second, in its present less exalted and less exacting mood the community are more apt to be content with them.

Another circumstance contributes to their rapidly growing importance. A Tradition of Apostolic Doctrine has already been formed. This is threatened by the inroads of that fantastic speculative tendency which afterwards attained its full expression in the systems of Valentine and Marcion. Agnosticism in embryo is already threatening to break up the Church into fragments and to dissipate the historical content of Christianity. It is in Asia Minor, the home of Paul's Churches, that this fermentation is most active. Paul's successors, however, have not that unlimited faith in the unassisted power of truth and the omnipotence of the Spirit which he had. They are not so sensitive

about "quenching the Spirit." The Pastoral Epistles and the letters of Ignatius show very clearly that the main breakwater against the rising tide of heretical speculation, which reached its flood in the days of Irenæus, was found from the beginning in that same consolidation of the Bishops' power, and that same extension of their functions as teachers and guardians of the Apostolic "Deposit," which we see in this Father carried to its extreme point under pressure of the same exigencies in a more advanced and acute form. The alarming spread of heresy tended to limit the original right of free teaching. In the Pastorals the Bishop as chairman of the assembly so to speak, appears invested with the power of shutting the mouths (*ἐπιστομίζειν*) of unedifying speakers. And the whole scope of these letters is to fix as a definite rule the irresistible trend of things towards investing the regularly ordained Church officers with the sole prerogative of teaching. They are, of course, the natural guardians of Tradition. They are saved by their very mediocrity from the dangerous neologising impulses of original thinking. Your prophet is always perilously individual and cannot merely repeat without variation the "sound form of words." Your Church officer is liable to no such temptations. It were well, then, in a time of unbridled speculation, when every day brings forth some new fantastic birth of heresy, that the latter should, as much as possible, retain the ministry of the Word in his own safe hands. A curious method is resorted to in order to encourage him to do so. It is recommended that Presbyters who teach should receive a double honorarium, a double share of the Church goods. The silence as to prophecy in these letters is very significant. We might fancy that at the time when they were written Prophets had ceased in these regions. This, however, was certainly not the case. In the Apocalypse, about the end of the first century, we still meet with a prophetess at Thyatira. The natural inference is that Prophecy, once ranked so high, is now severely ignored, because in the changed circumstances it is considered to be "of dangerous and unsettling tendency."

The Pastoral Epistles, however, though showing abundant traces of the new direction towards a fixed official organisation of the Church, still remain on the level of New Testament religious

thought. The first document where we feel that we are in a different atmosphere is the Epistle of the Roman Clement to the Corinthians, which belongs to the close of the first century. Here already we have before us a full-blown ecclesiasticism. It is the first unmistakable proclamation of the sacerdotal programme and emanates from the proper quarter—Rome. Most interesting it is to notice how the whole spirit of the Old and the New Rome, the strong instinct for law and order, uniformity, discipline, the organising and governing impulse are joined in this letter to a no less characteristically Roman feebleness of speculative grasp. Clement is a mere second-rate pulpit orator, who thumps the desk a good deal. His theology is barren and foisonless to a quite extraordinary degree; his whole philosophy is comprehended in the maxim of the respectable Mr. Bagnet, that "discipline must be maintained." All the more on that account, and with all the more practical effect in this rough world, does he throw himself with the undivided energy of a strong though narrow nature on the single point of external order. The Corinthians have fallen into disorders. They have deposed their Bishops! In favour of some non-official outsiders, probably Confessors, they have exercised the ancient right of the assembly to entrust the conduct of the Eucharist to any one they might happen to choose. Clement thinks this is a very serious sin on their part. He practically claims for the board of Bishops when once appointed a tenure *ad vitam aut culpam*. None but they should be allowed to preside at the Lord's Table or have the management of Church property. There is in his eyes an inviolable divinity which doth hedge a regularly appointed Church official. "The Apostles," he says, "foresaw that there would be strife about the Episcopate," that is, about the presidency of the Eucharist, and therefore they took special pains to "establish their first-fruits (their earliest converts) as Bishops and Deacons, and provided that after their death other well-approved persons should succeed them." This arrangement of the Apostles is of course to be regarded as a Divine ordinance, because "the Apostles were sent by Christ, and Christ by God, and therefore it cannot be right to depose from their office those who have been appointed by the Apostles, or later by other men of repute with the consent of the whole

Church." "It is a grievous sin to remove from the Episcopate such as have presented the offerings (the prayers and gifts of the community) in a blameless and holy manner." Nay, Clement believes that not only the indefeasible tenure of the Bishops, but also the whole external order of the Church, as it is usually observed, is divinely obligatory and unchangeable, and rests on the authority of Christ himself. "Everything must be done at proper times and places, and by the proper persons." The ritual of the new dispensation is no less definitely fixed than that of the old. It is the first expression in Christian literature of the sacerdotal thesis in all its naivete and crudity.

Now this Epistle had an extraordinary success. Not only did it accomplish its immediate object in reducing the refractory members of the Corinthian Church to subjection, it continued to be read on Sundays in that church as if it had almost the authority of Scripture and indeed had a very narrow escape of being included in the Canon! The views it advocates are not merely the personal opinions of the author or even the prevalent opinion in his church. They represent the general tendency of the time and did not take long to crystallise into universally valid regulations.

Already, then, by the beginning of the second century we see the Episcopal power has taken these great strides. First the board of Bishops are to have a *de jure* life office to the exclusion of all others from their characteristic functions. Henceforth, none but one of their number can preside at the Eucharist. Originally, we saw, if a Prophet or inspired Teacher was present this duty naturally fell to him, and, as may be inferred even from this epistle itself, the assembly had the unlimited right of appointing the officiating person on each occasion. The most important innovation contended for by Clement is that henceforth the choice is to be limited to the board of Bishops. For them is claimed *de jure* and *de jure divino* the exclusive right to discharge the most important functions in the ritual of the Church. This manifestly makes the greatest difference in their position. They are raised to the rank of a priestly caste. The priestly quality, which according to Paul belonged to all members of Christ's body—so that any one of their number was capable of offering the gifts of the brethren and so that the

person actually officiating was merely the representative of the priestly power of all chosen freely by the assembly on each occasion, this priestly power is now confined to a special class of officers. Hence, very significantly they are compared to the priests of the Old Testament, and the non-official multitude are sharply set against them as *laymen* whose sole duty it is to obey. Again we have very plainly indicated here the theory which afterwards played so important a part—Apostolic succession. God sent Christ, Christ sent the Apostles, the Apostles appointed in various places the boards of Bishops; by which *catena*, the board of Bishops is invested with the authority of God. Once more, it is not in any place or at any time where two or three are gathered together that the functions of the Ecclesia are to be found in full operation. It is only at properly fixed places, at set times and with regularly empowered officers. That is to say—no church, save where and when the Bishops have called a meeting; no church without their authority and presidency. It is clear that only one thing is needed to complete this concentration of power. When once the step is taken which is suggested by many things—convenience in managing church property, for instance, and in sustaining the intercourse with other churches, and, above all, effective strength in dealing with false doctrine—when once the priestly, apostolic and generally all-inclusive prerogatives of the board of Bishops as laid down by Clement, are united in the hands of one Bishop, we shall have the Catholic Church mature.

It was not long before this important step was generally consummated. By the end of the second century it may be said to have become the universal theory that the presidency of a single Bishop was necessary to constitute a true Church. We find namely, that while the heretical (gnostic) communities which broke off towards the middle of the second century still clung to the ancient freedom and recognised no single Bishop as having a permanent right to the administration of the Eucharist, in the year one hundred and ninety-nine on the other hand Natalius is set up by the Monarchians as a rival Bishop of Rome over against Zephyrinus. This event may be interpreted as marking the final victory of Uninominal Episcopacy.

By the end of the second century, then, we find the monar-

chical Bishop established even among heretics. Not long after its beginning, in the letters of Ignatius we find him already a fixed institution at least in the churches of Asia Minor. This region, the seat of Paul's churches, seems to be his home. There appears to be good reason to think that he is already present in the Pastoral Epistles. Strange that on Paul's own ground should have sprung the institution which was to metamorphose Paul's conception of the Church and rejudaise Christianity! Strange yet not unaccountable! Paul had laid stress on the Christ according to the Spirit as opposed to the Christ according to the Flesh--the historical Jesus. It was natural enough that he should have been followed by some disciples "who bettered his instructions." The abstract tendency of Paul's doctrine, produced to exaggeration and caricature, was the characteristic note of Gnosticism. And the beginnings of Gnosticism in Asia Minor seem by reaction to have brought forth Uninominal Episcopacy, the rock on which full-grown Gnosticism subsequently split.

The Churches of Asia Minor, then, as they are reflected in the letters of Ignatius, are exposed to an incipient form of Docetism. The great bulwark against this danger, the only safeguard of the Church's unity, is, in the martyr's eyes, the power of the one Bishop, who is evidently already established in all the communities he knows. He earnestly labours, therefore, to increase this power. His one theme in all his addresses to the Churches in Asia Minor is "Hold fast to your Bishop, be one with your Bishop." The real contribution which these extraordinary and much disputed Epistles make to the growth of the Episcopate seems to be one already anticipated to some extent in Clement, but still needing enforcement, and insisted upon here with almost monomaniacal iteration and intensity, that only the assembly, presided over by regular officers, Bishops, Presbyters and Deacons, is in any given place to be considered as capable of exercising the functions of the Ecclesia. The ancient right of Christians to assemble anywhere, whether in conjunction with specially ordained persons or not, and there to represent the totality of Christendom with all its powers, must cease. It has become dangerous. The whole region is honeycombed with heresy. Everywhere there are smaller or larger coteries of heretics who cannot be recognized as belonging to the true

Church. Henceforth there is to be in every place one assembly, with its Bishop presiding, and all Christians must adhere to that on pain of ceasing to be members of Christ's body. Only where the Bishop is, there is the Church. The significance of Ignatius is not that he is the advocate of Uninominal Episcopacy; that he takes for granted; but that he is the herald and fervent supporter of the principle, soon as we saw universally recognised, that the words of Jesus, "wherever two or three are gathered together in my name there am I in the midst of them," are no longer to be accepted in their full sense as the law for Christian assemblies. They are, on the contrary, to be interpreted, or rather contorted, into meaning "wherever the Bishop is, there is Christ." Ignatius' doctrine did not pass without a struggle, but, as we saw, by the end of the second century, its victory was complete.

By the time of Irenaeus (about 170 A.D.) Gnosticism, nascent in Ignatius' day, is now mature. The great systems of Valentin, Basilides and Marcion have arisen. Irenaeus' life-work is to combat them. And for this he has an invincible weapon ready to his hand in the authority of the already fully consolidated great Churches, each organized into iron unity under the headship of its sovereign Bishop. The substance of Gnosticism, as already indicated, is that it is an exaggerated Paulinism, an evaporation of the historical content of Christianity. The man Christ Jesus is reduced to a mere phantom, and thus the old abstract dualism—God on the one side removed to an infinite distance, man and the world on the other—the transcendence of which was the very essence of Christianity threatened to be restored. The inevitable method in refuting this was to appeal to the historical facts of the life of Jesus. But the Canon was then only in process of formation, not fixed beyond controversy for all. What, then, was the standard to appeal to? Naturally tradition. But who were the depositaries of the true tradition? In the first instance, of course, the Apostles, and then the great Apostolic Churches, such as Rome, Jerusalem, Corinth, Ephesus. Here, then, we have the whole procedure of Irenaeus. The Apostles, who, of course (as Clement had already discovered) knew everything, took special pains in view of the disorders destined to arise in the Church, to appoint proper persons as

Bishops in each community they founded. To these they handed over the entire "deposit" of Christian truth (as if it were a sack of wheat) which they in turn passed on to their successors! Apart from this great advantage the Bishops have another which one might suppose could have abundantly dispensed with all others. They possess the *Charisma veritatis*. They have an *ex officio* prerogative of Infallibility. One other point in the doctrine of Irenaeus is worthy of notice—the prominence he gives to Rome. Peter and Paul conspired to found this great Church. It is the pre-eminent authority in matters of doctrine and tradition, which, of course, mean the same thing to Irenaeus. "All Churches must necessarily agree with it (cannot be conceived as differing from it) on account of its quite special claims to go back to the very fountain head." (This seemed to be the meaning of the phrase, "*propter potiore principalem*.") Therefore, if one can discover the Roman tradition, which is naturally in the hands of the Roman Bishop, why that is a short cut to the absolute truth. All the other Apostolic Churches, if one had time to question them in detail, would be found most beautifully harmonious with it in all respects. Not that Irenaeus has any notion of the infallibility of the Pope as such. All Bishops are equally with him descended from Paul and Peter, and equally invested with their authority. In every Church he thinks one would find, as it is notorious there is in Rome, an exact list of monarchical Bishops going straight back to the Apostles. Irenaeus, good, simple soul, was not distinguished for critical acumen. He might have found in the work of Clement, his predecessor in his peculiar way of thinking, if one can without gross hyperbole apply the word to their mental processes, something very like proof positive that in those days there was no vestige, either in Rome or in Corinth, of that monarchical Episcopate which he regards as a necessary law of the universe.

Irenaeus, however, has at least this note of nobleness, that he bases the Bishop's power on the fact that he is for him the organ of God's truth. Cyprian, on the other hand, achieves one further grade of descent. With him it depends on the simple fact that the Bishop has been duly appointed with all regard to legal forms. The fact is that the Novatian schism has intervened. Cornelius the regularly appointed Bishop of Rome grants absolu-

tion to the *lapsi*, those who under stress of persecution have offered sacrifice to idols. Novatian objects, founds a sect, and sets up as Counter-Bishop in Rome. He is perfectly orthodox, in every other respect believes just as Cornelius does. Therefore, mere correctness of belief is no longer sufficient for salvation. One must besides adhere to the duly appointed Bishop. The followers of Novatian, most respectable Puritans, erring only from excess of zeal if at all, are as bad as the crew of Korah, Dathan and Abiram, and may confidently look forward to a fate no less terrific. Ep. 69,8.

Let us now sum up the stages through which, we have seen, the Episcopate passes. At first the Bishops are a board of financial control, connected however with the outer fringe of the most sacred act in the cultus of the Church. In the absence of their superiors, the Teachers of the Church, they gradually become the regular ministrants in this rite. Soon they become the only ministrants, and that with life tenure. It is recognised as their exclusive prerogative to officiate in this way. The theory of the Eucharist gradually becomes crass and material. Their power increases in proportion. In the struggle with heresy and through the consequent discrediting of free individual inspiration they come forward more and more as Teachers, a work which at first stood sharply contrasted with their proper functions. In the same struggle their powers come to be vested in the heads of one man—Uninomial Episcopacy is universally established, and it is now recognized in express contradiction with the words of Jesus, that the presence and sanction of Monarchical Bishops is a constitutive element in any act which implies the functions of the Christian Church. Moreover, a further extension is given to the Bishop's doctrinal authority. He is now the representative of Peter and Paul, the depository of their alone valid tradition, and to crown all he is endowed with the *Charisma Veritatis*, he is *ex officio* infallible in matters of faith. He is the one Priest and the one Teacher in his community. His mere ordination makes it a crime meriting eternal damnation to separate from him. Finally he cannot be deposed from his office by the community without recourse to a Synod of other Bishops, even in case of mortal sin.

The main *occasions* which led to this extraordinary concen-

tration of power and rapid metamorphosis of original Christian conceptions were the association of the Bishops with the Eucharist and the life-and-death struggle with Gnosticism. The great *cause* was the lowering of spiritual insight in the generations which followed the Apostolic life. The first exponents and adherents of a great movement are necessarily men of unusual force, fit to be free, capable of grasping pure ideas. It is only at certain rare moments of history that mankind in anything like masses rise to spiritual white heat. Faith in its highest sense, the immediate grasp of the Unseen and Eternal, that high energy which can abide on the levels of universal truth in direct communion with its source, seems possible only to a few. Most men in Protestant Churches and elsewhere crave and need to have the Truth embodied in the vehicle of some outward and visible limited symbol, some institution, or creed, which they take as exhaustive of the Infinite. It seems to be the law that periods of high creative vigour are followed by times of relapse and exhaustion. After the heights come the hollows. Luther is succeeded by the most hide-bound dogmatists, Paul by Clement of Rome. The words which demolished formulæ become themselves in turn a formula. The divine audacity of faith in the naked power of truth is followed by cold practical common sense and orderly mechanism. The free living voices pass, then the faint distorted echoes are heard. The giants who could tear down age-long inveterate traditions beget a race of weak Epigoni, who patch up a new tradition by a strange mixture of miscellaneous fragments drawn from the ruins of the dead past with old iron extracted from the siege-implements which battered it to the ground.

Still it has to be remembered that the Monarchical Episcopate has served great purposes. It prevented Christianity from evaporating in fantastic speculations which would have dissipated its most central and saving truth. The hard husk of the Episcopate was the protecting envelope for the great vital thought of the union of the Divine and Human realized in Jesus Christ and attainable to all men through Him. Its marvellous solidity of organization and imposing power, culminating in the supremacy of Rome, was the necessary school for the crude youth of the Northern races with whom the world's future lay, the indispensable strong citadel and lighthouse for the culture of the Middle Ages. But surely now its day is done, at least among peoples who have passed their period of nonage.

JOHN MACNAUGHTON.

SOME FURTHER SUGGESTIONS FOR THE POST-MASTER-GENERAL.

TO obtain more than we immediately hope for is, in general experience, an unusual condition of affairs. And yet that is the result to us of the Imperial Postal Conference, recently held in London. In November last, Mr. Mulock had the courage to reduce the postage on letters from Canada to Great Britain to three cents per ounce, and subsequently he carried through Parliament a bill authorizing a two cent rate per ounce on letters from points in Canada to points in Canada and the United States. Now we are to have this two cent rate made uniform, whether to Great Britain, the United States, Cape Colony or Natal, and we will probably find, when the preliminary arrangements are worked out, that whilst the Australasian Colonies may not reciprocate with a penny rate on letters posted there for Great Britain, Canada or the Cape Colonies, all letters destined in these countries for Australasia will be forwarded at two cents per ounce.

All this recalls the days of Rowland Hill and his courage in introducing penny postage in Great Britain. Post Office deficits will, of course, have to be faced at first, but we can have confidence in the future. If the reduction leads to our writing only three letters to our Canadian correspondents where before we wrote two, and to our increasing our correspondence with Great Britain to an extent equal to this heavy reduction in postage, the Postmaster-General will probably feel satisfied. Will we do this? It may require a little patience, but when a sheet of linen paper and a good envelope together now cost less than one-third of a cent, and a further two cents per ounce will carry the letter to our friends in the old land, 3,000 miles away, and, even farther, to the Cape Colonies, there is some good ground for expectation that with quick steamship facilities and enlarging business with Great Britain and the other colonies, our correspondence will largely increase.

The different provinces show great diversity in the use which they make of the postal service. Presently, Ontario contributes

100 cents per head of population to the gross postal revenue, whilst Nova Scotia contributes 70 cents, New Brunswick 67 cents, Province of Quebec 60 cents, and Prince Edward Island only 40 cents. There is much room for improvement in Ontario, for whilst Great Britain shows 45 letters posted per head of population, in Ontario there are only 31. And yet, each resident in Ontario writes on the average nearly twice as many letters as each resident in the Province of Quebec, and two and a half times as many as each resident in Prince Edward Island. These figures indicate the influence of environment and fertility of soil, as well as of the enterprise and education of the inhabitants, on the postal revenue.

It thus depends in the main on the use which the public makes of the increased facilities whether the deficiency which must inevitably result at first from these decreases in the stamp fee will not only be made up, but be in time turned into a surplus by the increased correspondence. The deficiency, however, suggests whether new or enlarging sources of revenue cannot be created in other departments of the postal service, and whether the expenses incurred in conducting that service cannot be reduced in some directions. Mr. Mulock is known to have effected very considerable savings already, and to have by this and other means largely done away with the great deficit with which former Postmasters-General seem not to have had the courage to deal. With the pruning hook already in his hands, he will, perhaps, be the more ready to receive suggestions.

Deducting the business of the city post offices, the reports show that the compensation, salaries and allowances paid to postmasters in British Columbia equal 29 per cent., and in Ontario 32 per cent. of the gross postal revenue of these provinces. Quebec expenses are similarly 34 per cent. of its gross postal revenue, whilst those of Nova Scotia, New Brunswick and Manitoba amount to nearly 40 per cent., and Prince Edward Island to 47 per cent. of their respective revenues from their post offices. Going further into detail, the compensation and allowances in the country offices vary from 30 to 50 per cent. of the gross revenue of the offices, and those of the non-accounting offices are generally higher, reaching in Prince Edward Island 54 per cent. Now, those who are familiar with the country post

offices know that, in a vast number of cases, the postmaster is a storekeeper as well, and that the result, if not the avowed purpose, of the combining of the positions, is that the post office becomes a stepping stone to an enlarging business in the sale of goods. Probably every person in the neighbourhood who sends or receives letters is familiar with the storekeeper's shop and the class of goods which he has to sell, and many are led thus to become his customers. If no profit was derived directly from the post office branch of his business, the storekeeper would yet indirectly benefit largely in increased sale of his goods. Is it therefore necessary that the post office should compensate him to an average of towards 40 per cent. of the gross postal revenue of his office—a figure that to an ordinary agent would be unexpectedly large? I merely make the suggestion that in this matter Mr. Mulock may on investigation find, possibly, an important field in which to use his pruning hook. If only ten per cent. of the gross postal revenue were saved, bringing the average compensation to 25 per cent., the saving effected would amount to over \$260,000.

There are some departments of the postal service where increased revenue will be, probably, readily obtainable in certain cases by changes in the methods employed, and in others by the reduction of the fee or increase in the weight allowed. More particularly is this increase in revenue possible in the money order system, newspaper postage, parcel post, savings bank and insurance of registered packets.

MONEY ORDERS.

The competition of the Express Companies in charges and facilities, and the long, inconvenient, time-consuming form which has to be made out by the applicant for a Government money order, necessarily have had their effect upon this department of the post office. The Express Companies' system is more convenient in several ways. Their orders are made out on verbal application and at all business hours, consume less time of both applicant and clerk, and are payable anywhere wherever there is an agency of the Express Company instead of at one specially named post office as in the case of money orders. The Government might take a suggestion from the British form of application, which is very brief, or perhaps even see its way to do away with a written application altogether. The postal note,

the introduction of which has for years been advocated by myself and others familiar with the British system, has at last to Mr. Mulock's great credit been brought into use in our Canadian post office, and it is to be hoped that its simplicity and the saving of time gained to both applicant and the post office will lead to the simplification of the money order as well.

Other facilities might, however, be afforded to the applicant. Presently, the money order office is closed at 4 p.m. in the larger post offices, whilst the other branches of the department continue open until a later hour. The result is that those desiring to make remittances after that hour are forced to apply to the Express Companies or to take the risk of an uninsured letter. The extension of one hour in the time of closing would in at least the larger cities be an advantage.

The public now buys orders for smaller sums than formerly. Twenty years ago the average amount of each money order was \$26, as against \$11 now. This is partly due to the increased use of the money order system by the public at large in the remitting of small sums, but is also partly accounted for by the extension of the Express Companies' business and the lower charges made by them on orders for sums over \$20. This was last year in part remedied by the Department reducing the commission charged, but even now for sums above \$40, the commissions demanded by the Government are in excess of those of its competitors. What would seem to be wanted is such a reduction as will induce those of the public who do not keep bank accounts to use the money order system more extensively for the transmission of the larger sums up to \$100. The effect of this would be to also raise the average of the commission received, which presently is only 9 cents on each order. That this is low will be understood when it is remembered that the minimum charge made by the banks on cashing cheques or on drawing drafts on other towns is 15 cents, however small the amount of the cheque or draft.

PARCEL POST.

Can the parcel post be called the unqualified success which we should like to see? There is an immense field for this department of the post office work, and yet in all this vast territory of ours the public only sends 1084 parcels daily through the post

office. Only one post office in nine on an average sends even one parcel daily. The speedy transmission of small parcels from one city or town to another is a great public convenience, and yet why will not the public take advantage of the opportunities the post office affords them? I have for years pointed out that the charges made are excessive. With a rate of 6 cents for each 4 oz., a 3 lb. parcel sent from, for instance, Toronto to Belleville or Kingston costs 72 cents, a rate which in most instances adds so much to the cost of the article sent as to be simply prohibitory. The postal fee is, in fact, made so large as to drive the business into the hands of the Express Companies, whose much lower charges are themselves still so excessive as to be largely prohibitory of that immense class of business, which stands ready waiting to be developed, between friends in distant parts of the country, and between the shopkeepers in the cities and towns and their country customers.

Those who have studied the British parcel post and the British railway parcel service know well the enormous expansion which has been given to this business there by reasonable rates. The railways regulate the charge by the distance and the weight. A 1 lb. parcel will be taken 100 miles for 10 cents; a 3 lb. parcel the same distance for 14 cents; and an 11 lb. parcel for 24 cents. On the other hand, the British post office has uniform rates irrespective of distance, and will take a 1 lb. parcel to the most remote point in the kingdom for 6 cents; a 3 lb. parcel for 12 cents; and an 11 lb. parcel for 36 cents. And what is the result of these rates? One firm alone—John Noble, Limited, of Manchester—sends about 1,000 parcels daily by post and rail, or as many as our whole Dominion does in the same time.

What an expansion of business the large retail houses of the Canadian cities would experience if the postal rates were adapted to what is known as "shopping by mail?" The experience of families in every town and village is that there are often articles of a kind or a quality which they cannot obtain in their local shops, and that it would be most convenient if they could procure them at reasonable cost from the large centres. In Great Britain the method is to ask for samples, and from these the selection is made. Here, in Canada, the postal rates on samples is reasonable, but when the samples arrive and the

choice is made, the parcel post rate is found to be simply prohibitory of business by so largely increasing the cost of the goods. Will not the Postmaster-General investigate this matter and give us graduated rates, commencing with 6 cents per lb. instead of the present uniform rate of 6 cents per 4 oz.? An even lower rate might in time be possible. Will he not also arrange to deliver the parcels at the addressees' houses in all cities where there is a postal delivery, and, eventually, in all the large towns? An enormous expansion of this branch of the postal service would follow—an expansion that would greatly aid the postal note and money order departments, for, the business being cash, every order given for execution by parcel post means an accompanying remittance, which would suggest a further use in this direction of the post office facilities.

It is very difficult to understand our Canadian parcel post when it is recalled that the 3 lb. parcel which sent from, for instance, Toronto to Belleville, would cost 72 cents in postage, would be taken by the same postal authorities from Toronto to England for 40 cents. An even heavier parcel will be carried to England than from points in Canada to points in Canada. And now the Postmaster-General of Great Britain proposes that it should cost only 48 cents for colonial parcels up to 7 lbs. in weight, and for that rate that they should be taken to the Cape and Australia as well as to the United Kingdom.

NEWSPAPER POSTAGE.

The vast number of newspapers carried free by mail has always been a weak spot in the financial results of the Canadian post office. The new rate of $\frac{1}{2}$ cent per lb., about to be imposed, will only realize about \$82,500, and is too small to be of much service. The chief question which has to be considered is—who is to pay the newspaper postage? the proprietor or the public? The new rate being small, the proprietor will be unable to add it to the price of the paper, and postage must to that extent be an added expense to his establishment. Increase the rate to 2 cents per lb.—a very favourable rate—and, whilst it will give a substantial addition to the post office revenue, it will at once bring in the public as a possible factor to be dealt with. That the public is willing to pay its share of the cost of delivery of the newspaper, and that the newspaper should not be free, is the opinion

of business men generally. That this share should be the whole postage would not be fair, as, since the newspapers have been delivered free, the cost of paper has been enormously diminished by the use of spruce pulp, and the mechanical processes for printing and issuing the newspaper cheaply and quickly have been greatly improved. With paper at 2 cents per lb., copies of the great Montreal and Toronto morning and evening dailies do not cost for paper alone more than one-third of a cent each. It will be of course alleged that other expenses necessary in conducting a newspaper, notably in the telegraphic news and the reporters' department, have increased, but against this, the circulation has greatly increased, and so have the returns from advertisements in the case of most papers in the great cities. Again, the paper which will have to bear the postage is issued direct from the publishing office, as a rule at full price, and does not pass through the hands of news agents and news boys at a one-third reduction. Receiving the full price, the publisher can better afford to pay the increased postage. There is thus much to be said on the side of the public, as well as the publishers, as to the share each should bear of the cost of carriage by post, but there is absolutely no valid argument why the Dominion Government should carry annually over 8,000 tons of newspapers to distant points without charge, and thus incur a great deficit in a department of the Government which should be self-supporting. The Postmaster-General will be sustained by the business community and the good sense of the people at large, if he increases the postage rate on newspapers to a point that will afford a profit, or will, at any rate, equal the cost of handling them.

Another anomaly! Why should a newspaper posted by a publishing house be free when the same newspaper posted by one of the public at large would require a stamp? Is not the mission performed by the newspaper in each case the same? Why should a barrier—as some would regard postage—be placed on this use of the post by the public? And yet the public has hitherto willingly paid this charge as being, on general principles, fair. The suggestion that can be here made is that, as few daily or weekly newspapers weigh less than an ounce, the limit of weight under which the $\frac{1}{2}$ cent postage is charged should be

increased from one to three ounces. The great Montreal and Toronto dailies average in weight about $2\frac{1}{2}$ ounces, and facilities should be given to the public for sending them at the $\frac{1}{2}$ cent rate.

SAVINGS BANKS.

One object of the Savings Bank is understood to be to encourage thrift among the working classes, and its depositors also include large numbers of young people. Under the present rules, no deposit under one dollar is permitted, nor are any fractions of one dollar accepted. Now, one dollar is a considerable sum to most wage earners, and it takes time for their accumulated savings, as well as those of the children, to reach that amount. Who, besides, does not realize the temptations which are in the way of both to spend before the savings reach the prescribed minimum? My suggestion is that the question should be carefully considered whether the minimum should not be made twenty-five cents, and whether any number of twenty-five cents should not be accepted up to a given amount. It will probably to some extent increase the clerical work in the department at Ottawa, but it will swell the Savings Bank returns, and encourage thrift, and it has for precedent the British post office, which accepts deposits of one shilling or any number of shillings. Twenty-five cents being one quarter of a dollar, adding up columns and all calculations become simple and are done with great rapidity.

Another suggestion is that some special advantages and facilities in connection with deposits should be afforded to those savings institutions and working men's associations throughout the country which receive the small savings of the working classes and of the young people. No limit in amount should be placed on their deposits, and they and all small depositors should be allowed to buy 3 per cent. Dominion stock at par direct from the Government.

The sale of annuities and Government life insurance form other sources of revenue open to the Savings Bank Department. The large commissions paid by the ordinary life companies to their agents, and the fact of the Government having already its equipment in buildings and staff, and being free from taxes and expensive management, would of themselves enable the Government to realize considerable profit, whilst the fact of the security

being Government would form a great attraction to the public and would do away with the necessity of accumulating great reserves for the protection of the insured. The matter is well worth considering.

INSURANCE OF REGISTERED LETTERS.

For several years I have, but thus far unsuccessfully, tried to induce the Government to undertake the insurance of registered letters up to a maximum amount of \$250 on each letter or package. The Post Office statistics have shown that, in the extensive business of the registration department, the revenue is large and the actual loss small, and that insurance would largely increase the number of registered letters. All this has hitherto had no effect in the face of an apparently general policy that the Government should not incur the risk of loss among letters. However, the present Postmaster-General has been giving the matter more attention than his predecessor would, and it is to be hoped that some scheme may be evolved which will satisfy the desire of the public for safety in the transmission of money and valuable property. Presently, the Government exacts annually about \$175,000 in registration fees, but in return assumes no liability whatever, although it does agree to obtain a receipt for each letter if it arrives at its destination safely, and is assumed to make an investigation if it does not.

I can only repeat what I have frequently said, that a system of insurance of registered letters would not only be a great convenience and ensure to the public a means of safe transmission, but be a source of considerable profit to the Government without much attendant risk. It is encouraging to find that the British Government has very recently once more increased its minimum limit, up to which it will insure—this time to £125 stg.

A. T. DRUMMOND.

BINOCULAR VISION.

POLYPHEMUS was blinded by the burning stake of Ulysses and his friends, because the Cyclops had but one eye. If he had had two eyes there is no doubt but that Ulysses would have formed a savory dish for the breakfast of Polyphemus, and the beautiful story of Homer would have closed at this point.

It was unfortunate, then, for the Cyclops that he had but one eye, and it might be concluded that the purpose of two eyes, or at least one of the purposes, is that if a person happens to lose one eye, he is not thereby blinded. Such a conclusion is, however, of doubtful legitimacy. Polyphemus was a creature of the imagination, and no one-eyed beings are now or ever have been known except some low forms of molluscs or crustaceans, and the real function of their single eye is somewhat of a doubtful quantity. Many animals amongst the lower classes, such as spiders, &c., have a multiplicity of eyes, but amongst the higher classes, and especially the vertebrate animals, every individual is supplied with two eyes, complete or rudimentary, and with two only.

Why the eyes exist in single pairs only is probably not explainable, as it appears to be impossible to get at the ultimate reason of things. But it is for the same cause that the higher animals have two ears and two nostrils, and consist in fact each, as far as external form is concerned, of a right and a left symmetrical semi-animal united along a median plane. The very existence of the right and left symmetry is the reason for the doubling of the external sense organs, and its cause must be sought for in some occult influence in the primary processes of evolution.

But if we cannot give a reasonable explanation as to why an animal has *two* eyes, we can at least understand some of the purposes which the presence of two eyes serves in the mechanism of vision, and especially in human vision, for, after all, the human animal is the only one upon which anything like satisfactory experiments can be carried out in the elucidation of this subject.

In man the fields of vision of the two eyes are nearly altogether in common. That is, the same scene with pretty much

the same limitations is depicted upon each retina, the principal difference being in the relative positions of the parts with respect to the retinae; and this co-extension of these pictures is specially important in the explanation of binocular vision, which follows.

In birds and many other animals seemingly endowed with acute and accurate vision, the fields of the two eyes are nearly or altogether exclusive. Our explanation of the nature of binocular vision does not apply to such animals. What the real character of their vision is can, to us, be only conjectural, inasmuch as we cannot bring ourselves under the conditions governing the vision of such animals, nor can we successfully experiment upon them with respect to such a purely subjective faculty as that of seeing.

We may premise, to begin with, that one of the purposes, and the principal purpose served by the co-ordination of two eyes in the act of vision, is to see *distance*, and through this to distinguish between figures which occupy three-dimensional space and those which lie upon a plane approximately normal to the axis of vision. Before taking up this part of the subject, however, let us consider the essential construction of a single eye, and the nature of monocular vision.

Choose a room with a single window looking out upon some extensive landscape, or street scene if possible. Close the window with a dark shutter, so as to exclude as much light as is practicable, and all if possible. Make a hole about an inch in diameter in the shutter and fit into it a common spectacle lens of as long focus as can be conveniently obtained. The light from the scene without will come through the lens, and if a white screen, such as a large sheet of paper, be placed at the correct distance from the lens, a beautiful moving and living picture of the out-door scene will be temporarily painted upon the screen. The leaves will be seen to tremble in the breeze; men and women walk the streets; children go through the various motions of their plays; clouds move in front of the blue sky; and in short all the motions to be seen in nature are seen to be faithfully carried out upon the picture, which is colored with a truthfulness which transcends the ability of the greatest master; but the picture is necessarily inverted.

Now this dark room with its contrivances represents a

human eye. The retina is the screen, the iris is the shutter, the pupil is the opening in the shutter, and the lens and transparent humors which fill up the body of the eye represent, in their functions at least, the spectacle glass. And just as every object in front of the darkened window is faithfully pictured upon the white paper screen in the room, so every object in front of the eye is accurately painted upon the retina, which lies at the back of the eye. Of the intimate structure of the retina, which consists of an exceedingly complex arrangement of nerve fibres and nerve material in connection with the optic nerve, we have nothing here to do, as we are dealing merely with the mechanical part of vision. But it will be proper to say that whatever be its source, whenever a picture in light and shade, and it may be in color, is impressed upon the retina, then, by some means unexplainable by us, the judgment interprets the result as a real object placed in front of the eye and which is capable of producing the picture which excites the retina. Thus when we stand in front of a plane mirror and place a lighted candle somewhere behind us, the light from the candle, after being reflected at the mirror, enters the eye and pictures the candle flame upon the retina; and we *see* the candle not behind us, but in front of us, as a real object.

Such, then, are the simplest elements of the mechanics of vision.

But the objects in front of the eye are pictured upon the same retina, just as in our experiment they are upon the same smooth screen, and yet we see them at different distances, some being very near and others far away with hosts of intermediate ones occupying all positions between these extremes. How, then, does this come about, or, in other words, how do we see distance?

The *seeing of distance* is a judgment, formed upon several synchronous experiences, some of them depending upon consciousness of muscular action in the eye itself, and others upon variations in the character of the light which comes from the object, and upon relative position of parts. These may be accordingly classified into (*a*) subjective means, and (*b*) objective means of seeing distance.

(*a*) The subjective means of seeing distance are: (1) The

focussing of the eye, and this alone can be considered in dealing with a single eye, and is hence the only subjective means possessed by a person with a single eye; and (2) The correlation of the two eyes, by which we direct the two visual axes, or lines of sight, to the same point; and this means, which is specially potent, is characteristic of the use of two eyes.

(1) In our experiment previously described we will notice that a particular object in the landscape becomes sharp and distinct in the picture only when the screen is placed at a particular distance from the lens; and that this distance is greater for objects near the window than it is for objects more remote. So that no position of the screen will render all objects sharp in outline at the same time, and it is only by moving the screen back and forth that we can successively bring the pictures of outside objects into conditions of sharp definition.

A similar state of affairs exists within the eye. For distinct vision of an object its picture must be sharply delineated upon the retina, and for this purpose the eye must be adjusted or focussed by muscular effort; and the amount of this effort, although we may be almost unconscious of it, enters into our judgment of the distance of the object.

The amount of motion, however, necessary for the focussing of the eye is in all practicable cases very small, and the major part of it comes into play when focussing for objects not far removed from the eye. Thus the difference in focus for an object at a distance of six feet and for one indefinitely distant is scarcely appreciable; so that this element in the seeing of distance, although more important to a person with one eye than to a person with two, is of very little importance in any case, except with respect to objects quite near the eye.

(2.) Every person is aware that when he fixes his attention upon some one object in a general landscape the part of the object to which the view is directed comes out sharp and clear, and that although he has a general cognizance of all the rest of his field of vision, its parts become more and more confused and generally more undistinguishable as they are more and more removed from the point under consideration. And that if he wishes to view the landscape in detail it becomes necessary to run his eye over the whole of it, or, in other words, to take a

great number of consecutive points in it as momentary points of vision. From the optical principle of vision it can be readily shown that this property of the eye is exceedingly important, but this is apart from our present purpose.

In the retina of the eye there is a very small spot called the *macula lutea* or yellow spot, which appears as a slight depression in the retinal surface. This spot is the most sensitive point in the retina, and only that part of the picture which falls on the spot gives rise to clear and distinct vision.

When we look at any point in an object we bring the eye, by proper muscular work, into such a position that the picture of that point falls upon the yellow spot; and if we are looking with both eyes, then both must assume a similar position, and the same point is pictured upon the yellow spots of both eyes. Under this condition the eyes are properly co-ordinated, and for some reason, beyond our power of explanation, the two pictures give rise to an impression of only one external object.

This co-ordination takes place so rapidly and so readily, as we shift our point of vision from place to place, that we are apt to think that it must be involuntary, or that the two pictures can under all circumstances, act only in unison with one another, or as a single picture.

That the pictures act, in general, independently of one another, is readily shown. For if, when looking at an object, a slight pressure be made upon one of the eyeballs so as to destroy the perfection of the co-ordination, two objects become visible, or in other words the object becomes doubled; showing clearly that each picture acts for itself, and that the retinal affects are independently interpreted.

And that the co-ordination is not spontaneous, but the result of independent muscular action, is shown from the fact that the loss of the power of co-ordination sometimes appears as a troublesome disease under the name of *diplopia* or double vision, and that it is commonly induced temporarily in those who tarry long at the wine-cup.

The straight line drawn from the yellow spot of the retina to that point of the object upon which the vision is directed is the axis of vision; and for clear binocular vision of any point the two axes of vision must meet or cross at that point, and con-

versely, the position of any point clearly seen by the two eyes will appear to be at the point of intersection of the axes of vision. For very distant objects the axes of vision are practically parallel, and this appears to be the exterior limit of their relative positions. The interior limit can be determined by approaching the finger or other object, at which we are looking, towards the nose. When very near the nose the muscular effort necessary to direct the eyes inwards becomes very evident, and even painful. This muscular effort necessary to co-ordinate the two eyes is the principal subjective element in our judgment of distance.

The following experiments will illustrate the subject. 1. Suspend a small weight by a thread, and, shutting one eye, try to bring the point of your pen or pencil laterally to touch the thread. Try the same with both eyes. The thread must not be held by one hand, as this would bring the muscles of the arms into play. 2. Placing your head about at the level of the desk upon which your ink-stand is sitting, try to dip your pen into the ink, using one eye only, and then using both eyes. 3. Try to thread a needle, using one eye only. The results will certainly indicate to any one trying these experiments the function of the two eyes in seeing distance.

The following experiment, though not always successful at the first trial, is exceedingly interesting,

Choose a papered wall with a small pattern in which the pattern repeats itself in horizontal lines. For the purpose of explanation denote a number of consecutive repetitions of the pattern, counting from left to right, by A, B, C, D, &c. Standing eight or ten feet in front of the wall, direct both eyes to A, say, and the wall is seen in its proper position. Now direct the left eye to A, and the right eye to B, and let the eyes be co-ordinated in this position—a thing that can always be done, although beginners may find difficulty at first. Immediately the wall comes forward to the new position at which the visual axes cross. Next, while the right eye is still directed to A, direct the left to C, and the wall takes another bound forwards again to the new position at which the visual axes cross, &c.

If the distance from A to B is less than that between the eyes, then by directing the left eye to A and the right to B the wall may be made to recede into the distance. And thus the

wall may be made to approach or recede at the pleasure of the experimenter, not gradually but by successive bounds or steps. The illusion is complete and the hand or a pointer may readily be made to appear to pass through the wall from front to rear and back again without any resistance being given.

The experiment may be beautifully carried out with a pane of figured sand-cut glass, such as is usually sold in the shops, but however prosecuted it shows clearly that wherever an object may be, it is seen to be at that distance at which the visual axes cross when the eyes are so co-ordinated as to see the object distinctly; and it is owing to the repetition of the pattern in the experiment quoted that we are able to see the pattern distinctly while co-ordinating the eyes in more than one position. In these cases, as probably in all cases of ocular illusion, the judgment is not at fault, but some abnormality or irregularity in the ocular impressions has produced the erroneous result.

Again, an elementary knowledge of geometry teaches that the amount of change in the co-ordination of the eyes to bring them from one object to another at a different distance is much greater for near objects than for two distant objects separated by the same interval. Thus the change from an object one foot distant to one ten feet distant is comparatively great, while for objects at the distance, say of 100 feet and 110 feet, the change is scarcely sensible. And it would be very difficult, if not impossible, for any person, by this means alone, to distinguish a distance of say 500 feet from one of 550 or even 600 feet. So that this element in our judgment of distance, like the previous one, is most valuable in the case of near objects, and practically of no value for very distant ones.

The explanation as to how we form our judgment of great distances brings us to consider the objective elements. These are: 1. Geometrical perspective; 2. Aerial perspective; and 3. Parallax arising from the use of two eyes.

1. When we look out upon a landscape we notice that trees, and men, and cattle, and all other things of nearly a fixed size, appear to grow smaller, or to subtend a smaller angle as they recede into the distance, and we readily make out that approximately the angle subtended varies inversely as the distance. And this diminution in apparent size is at once an indication of

the distance of the body, if it be something with which we are familiar. Also, the whole ground of the landscape is spread out before us, and upon it innumerable objects are marshalled in regular order, rising higher and higher in our field of vision as they are farther removed into the background. And thus the relative position of an object in the field of vision is also to some extent an indication of its relative distance. These two things form what is called geometrical perspective, and a picture false in geometrical perspective can never appear natural.

2. The atmosphere when seen through long stretches near the earth's surface, is distinctly visible as a blueish-gray mist which masks the colors of objects and hides their details; and provided the object be on or near the earth's surface, the farther away it is the more atmosphere intervenes, and the duller and more indistinct the object becomes. This is aerial perspective; and we have learned by experience to connect the idea of distance with this phenomenon of mistiness and concealed details.

It is very largely by these two elements that we all judge of the relative distances of objects seen in the landscape, and these are the only ones vouchsafed to a one-eyed person.

Many peculiarities in the estimation of distance are now readily explained.

a. The sun or moon appears larger when rising or setting than when high in the heavens, when the fact is that they subtend slightly larger angles in the latter case than in the former. The reason for this is that when on the horizon we have trees, buildings, &c., with which to compare them, while in the higher skies we have not. Also, owing to the intervening objects, these heavenly bodies appear to be more distant when on the horizon than when in the upper sky where there are no intervening objects, and as they subtend practically the same angle in both cases, they must necessarily appear larger at the horizon than when near the zenith.

b. Objects appear nearer when seen across a large sheet of water than when seen across an equal stretch of country. For, in the former case there are no distinct intervening objects, while in the latter case there are.

c. The rising sun appears larger when seen through a misty or foggy atmosphere than when the atmosphere is clear, because the

aerial perspective being exaggerated, makes the sun appear more distant; and the like is true for other objects as well as for the sun.

d. A person who has obtained his visual experiences in a country with a heavy misty atmosphere, for obvious reasons invariably underrates distances in a country where the atmosphere is bright and clear.

e. To persons who have not been accustomed to see mountains, a mountain top always appears to be less distant than it really is; because the mountain bulks so large in his field of vision, and he has been used to attributing such a phenomenon to nearness of the object.

3. Hold up a pencil in line with a distant tree and look at the tree with one eye closed, and you will see one tree and one pencil. Now look at the tree with both eyes and you will see one tree but two pencils. Similarly, if you look at the pencil you will see one pencil and two trees. This effect is known as parallax, and it is due to the fact already stated that we cannot co-ordinate the two eyes for more than one point at a time, and that accordingly the two eyes do not and cannot, in viewing a landscape, see the same picture.

As has been already pointed out, when we fix our view on any point in a landscape we see only that point clearly, while all other points are more illy defined as they recede farther from the central one, and we now see that all points except that to which our view is directed are more or less doubled.

We may examine a scene in detail by running our eyes over it as has been already said, but it is the single view with its general envisagement of varying distinctness and doubled objects from which we obtain our impressions of distance, and relative position and general extension in tridimensional space. And, of course, along with this view go both geometrical and aerial perspective as potent aids.

Hence to see space the pictures formed upon the retinæ of the two eyes must be similar, but not identical, and their differences must be not arbitrary, but such as to satisfy all the principles of geometrical perspective with two distinct central points, and, moreover, the pictures must be so placed that consecutive corresponding points may be brought to the yellow retinal spots in orderly succession.

If these conditions can be carried out we will see space independently of what may have been the origin of the retinal pictures. No process of manual drawing can produce two such pictures with anything like detail, but it is possible to produce such in outline.

For complex pictures we must have recourse to the art of photography, and the only objects or scenes that can be thus obtained are or have been in actual existence.

The painter makes use of light, shade, color and geometrical and aerial perspective, but he cannot introduce the effects of parallax; and hence the best of paintings must fall very far below the reality in depicting a scene like a landscape, in which distance plays so important a part. A painted landscape represents the scene somewhat as it appears to the single eye. But the most beautiful landscape when thus seen is flat and tame as compared with its binocular presentment. In fact the better way to enjoy a good painting is to view it with a single eye, for then, while parallax does not add to its relief, neither does the want of parallax take away from it. And for obvious reasons, already dealt with, a large painting seen from a good distance is much more realistic than a small one seen from near by.

The camera is the only means of furnishing two pictures, of a complex scene, complete in all details and capable of satisfying the conditions for binocular vision, and the stereograph is the article furnished. A stereograph is taken in a double camera supplied with two lenses about three inches apart, and in which each lens produces its own picture of the scene presented. We have thus, on the developed plate, two pictures which, with the exception of color, are exact counterparts of the two pictures which the same scene would impress upon the two retinæ. And when the eyes are so co-ordinated that the right eye sees the right picture and the left eye the left picture, we see the scene in all its fullness of detail and with all its extension in space. The view thus presented cannot properly be called an illusion, as it is the result of completely satisfying the conditions of vision, and we may look upon the stereograph as the scene crystallized, so to speak, into a portable form.

The distance between the pictures will in general be the same as that between the lenses, and as it is not practicable to

have the pictures overlap each other, they are necessarily limited in their lateral dimensions. So that the angular extent of the scene depicted cannot be very great unless the focal lengths of the lenses be very short or the lenses be moved far apart. But a less focal length than six or eight inches is objectionable, while the separation of the lenses introduces certain peculiarities into the view, which we will deal with hereafter. The general usage is to separate the lenses by an interval a little greater than that between a person's two eyes, and thus to obtain as great a lateral extent of scene as can be conveniently done without introducing manifest peculiarities. But as we have no power to so adjust the eyes that the visual axes may be divergent, a necessary condition in uniting such pictures, we require the aid of the instrument known as the stereoscope. This consists of two half lenses reversed in position and so arranged that each eye sees its proper picture through one of the half lenses, the functions of the instrument being to magnify the pictures and to so bend the axes of vision as to enable the observer comfortably to unite the pictures.

Like other instruments, a stereoscope may be good or it may be bad, and any stereoscope in which a person, with some experience in using one, cannot readily and comfortably unite the pictures is bad. Of course some people have so little control over the adjusting muscles of the eye that they find it difficult to unite the pictures even in a good stereoscope.

The following experiments, which can be readily carried out by any person who has proper control over the muscular system of his eyes, are both interesting and instructive.

Call the left-hand picture of the stereograph L, and the right-hand one R. Choose a stereograph of a particular object, such as a person's head and face, and holding it about two feet distant and in proper position, co-ordinate the eyes so that the right eye sees L and the left eye sees R. The head immediately becomes reversed, that is, the nearer parts recede and the distant parts advance, so that the impression is that one is looking into a hollow mask. If the experiment is tried on a landscape stereograph the effects are similar, but not so pronounced, for the existence of geometrical and ærial perspectives which are not reversed tend to produce confusion. In this experiment the visual

axes cross between the eyes and the stereograph. Cut along the line of junction of the two pictures so as to divide the stereograph into separate parts, and exchange R and L. Upon carrying out the experiment now, each eye sees its proper picture and the view appears in all its perfection of relief, without the use of the stereoscope. But on account of the visual axes meeting so near the eyes the whole scene appears quite near, and therefore of a diminished size, as if seen through a minifying glass. Again, place the two pictures in their original relation, but overlapping until the distance between corresponding points is less than that between the eyes. The figures may now be united by causing the visual axes to meet at some distant point. In this case the proper scene appears again, without the use of the stereoscope, somewhat distant and somewhat magnified. These phenomena offer no difficulties of explanation after what has been said.

Some one has said that man is the measure of the Universe. However this may be, it is certain that the distance between a man's eyes is the measure of the objects which he visually contemplates. As regards size, a man naturally compares all objects with himself. To him a tree or a house is a large object, while a blade of grass or a way-side flower is a small one.

But if the man's eyes were a hundred times as far apart, that is, if the man were a hundred times larger or linearly, the tree and the house would be small objects, and the only large ones of his landscape would be the lofty hills and the mountains. Now, it is not possible for a man to increase the distance between his eyes actually, but it is possible, by means of the stereograph, to do so virtually and effectively. For the distance between the eyes is virtually the distance between the lenses of the camera when forming the stereograph. The stereograph of a landscape taken with the lenses 6 feet apart gives the view as the actual scene would appear to a giant whose eyes were 6 feet asunder. And a stereograph of the City of Paris taken with the lenses about 20 feet apart presents to view a city complete in every detail, but diminutive in size, not as if seen through a minifying glass, but as if constructed of toy blocks, and in which it would appear to be an easy feat to pick up a whole building in the hand and plant it down in some other place.

These results are peculiar and interesting, but let no one think that this is the whole of it.

Some years ago it became a question not easy to settle as to whether the corona which appears around the sun in total, solar eclipses belongs to the sun or to the moon or to the atmosphere of our earth. At a favorable total eclipse of the sun, two photographs were taken at the same instant and at places some hundreds of miles apart. When these were brought together and viewed through the stereoscope the question was settled at once. For the moon was seen quite in the foreground, as it should be, while the sun with his corona receded into the far distance.

Again, the moon is too far away to have its appearance affected in the least by the parallax due to the two eyes. Fortunately, however, the moon, on account of the excentricity of her orbit, allows us to see a little way around one side of her average presentation at one time, and 14 days after to see a little way around the other side. If two photographs of the moon were taken at these two times, with the moon in the same phase at each, the effect would be the same as if our eyes were separated by some thousands of miles.

The writer has such a stereograph by Rutherford and Bierstadt, and a view of it is something like a revelation. There is no question concerning the moon's rotundity, for she is there with all her markings, her valleys and mountains and extinguished craters, a goodly sized ball which one feels strongly tempted to put out his hand and handle. It is generally believed, on account of the moon's always presenting the same side to the earth, that her form is more or less egg shaped with the longer axis directed towards the earth. In the writer's stereograph this form is quite evident; so the stereoscope may lend its aid in many ways to corroborate our scientific deductions.

In illustrating the geometry of space the stereoscope is in some respects superior to models, and it is always of the highest value. Some months ago Professor Greenhill, of Woolwich, England, presented to the writer six stereographs representing as many different cases of algebraic gyrostat curves. One of these pictures appears very much like a scene of confusion, in which curved lines cross and recross without any definite system, and requiring a very vivid imagination to put them in their proper

relations in tridimensional space. Place the card in the stereoscope and the scene of confusion flashes into a thing of beauty, in which graceful curves loop and twine with geometrical regularity, while lying upon and marking out the surface of an otherwise invisible sphere.

The stereoscope is altogether a remarkable instrument in both the manner of its operation and the work which it does. Its lines of usefulness are quite different from those of the telescope or the microscope, but, in many ways, it can be made the hand-maid of science, and do valuable educational work. Even in its more common field of application it is a useful educator.

For it brings to our homes and our firesides the objects and scenes of beauty or wonder to be found in earth or air or sea throughout this wide world, and presents them to our view, not as the panorama or the lantern does, but with all the fullness of stereographic relief, thus giving us one of the chief pleasures of the travelling sight seer without one tithe of the expense and discomfort incident to travel.

N. F. DUPUIS.

ART, MORALITY AND RELIGION.

(Continued from the April number.)

ARISTOTLE, in his theory of art, goes far to transcend the limits of his philosophy. If, as he holds, poetry represents the human and divine in concrete form, it must be because here an aspect of both is presented which is essential to the boundless wealth of existence. There is considerable difficulty, however, in adjusting his conception of art as an end in itself with his demand that it should be in harmony with the moral ideal. As Mr. Butcher points out, he regards the charge that a poem is morally hurtful (*βλαβερόν*) as a very grave one.* He tells us that the actions or opinions of any character in a poem must be viewed in connexion with the whole circumstances; "whether, for instance, it be for the sake of attaining some greater good, or

**Poetics*, xrv. 20.

averting some greater evil."* This seems to indicate a large and liberal view of morality. Apparently, we are not to condemn as immoral whatever is contrary to customary morality. What in the case of a ruler, who has to consider the interests of the whole people may be justifiable, may be inadmissible in the case of a private citizen. And this, perhaps, suggests one way in which Aristotle's apparently discrepant views (1) that art is independent of morality, (2) that it must be in harmony with morality, may be, partly at least, reconciled. Morality is not a number of cast-iron rules, fixed by custom, and art may violate these; but, it must not violate the higher moral law which consists in the realisation of the ideal. Antigone, *e.g.*, violates the law of the state, and from the conventional point of view acts wrongly; but she is in harmony with the unwritten law of heaven. Sophocles therefore secures the sympathy of the audience in her fate, or the representation is poetically good, though it is contrary to the ordinary law binding upon the good citizen. This would seem to come under Aristotle's formula of speech or action which is for the sake of attaining a greater good. If this interpretation is correct, the opposition of art and morality is partly done away. A character may, from the ideal point of view, which is beyond all convention, be profoundly moral, and may yet be in open contradiction to conventional morality. This may also explain why Aristotle distinguishes so decidedly between poetry and politics. Politics is the art of government, and must enforce the laws of the state irrespective of the motives of the individual. Yet there is a higher law which transcends the state, and this law it is the poet's function to exhibit.

There is another case of a different kind. The instance given above is of a character profoundly moral, though contrary to existing social law. But a poem may represent characters which are immoral even from this higher point of view. How far is this legitimate? Aristotle answers that 'depravity of character' is 'justly censured when there is no inner necessity' for representing it; and he gives as an instance the superfluous wickedness of Menelaus in the *Orestes* of Euripides. The 'superfluous wickedness' in this case is due to the new representation of Menelaus introduced by Euripides, which was contrary to the conception of

**Ibid.*, xxv. 8.

the character fixed in the mind of the spectator by Homer and his successors. Aristotle's censure seems to mean that Euripides went out of his way to disturb the traditional conception without 'necessity,' *i.e.*, without sufficient justification by the 'necessity' of the plot. This could not but have a disturbing effect upon the mind of the spectator, and therefore tended to destroy the unity of the whole. It seems to me that Aristotle's censure amounts to a charge against Euripides of portraying Menelaus as depraved in character for a 'sensational' effect, as we should say. The poet must therefore, in Aristotle's view, be permeated by a high conception of human life. Wantonly to introduce evil characters shows that he has a low conception of his art. If human destiny is not represented from a lofty point of view, it cannot but produce in the spectator a false and mean conception of humanity, and this is inconsistent with that rational enjoyment which it is the purpose of art to secure. Aristotle, then, holds that the tragic poet at least must introduce vicious characters only so far as they are necessary in the representation of the collision between spiritual forces. The mere portrayal of wickedness cannot be a proper object of poetry, but is justifiable only as a means to the exhibition of the rational meaning of life. It is, therefore, in accordance with the spirit of Aristotle to say that the poet must have a belief in the principle of goodness as the law of life; and that a sceptical disbelief in rational law will prevent him from being a perfect artist. If a poem in its total effect does not produce in the spectator the feeling of harmony with himself, it is bad artistically, because in the wide sense it is bad morally. It is no excuse that it is "realistic," in the sense of portraying men as they *are*: for in Aristotle's view the object should be to portray life as it *truly is*: which is a higher form of reality than that of the prosaic understanding or common experience.

The general point of view here indicated receives illustration from what Aristotle says of the objects of the imitative arts. The 'persons acting' who are the objects of imitation, as he tells us, may be either of a higher or lower type (*σπουδαίους ἢ φαύλους*); or, as he immediately explains, they must be either 'better than in real life' (*ἄελτίους ἢ κατὰ ἥμῶν*) or worse (*ἢ χείρονας*) or as they are (*ὁμοίους*); and he adds that 'moral character' (*τὰ ἠθῆ*) mainly answers to these divisions, goodness (*ἀρετή*) and badness (*κακία*) being

the distinguishing marks of moral differences.* According to this view, there are two types of moral excellence, which deviate from men as they actually are, viz., (1) that which is higher morally, (2) that which is lower morally; and Tragedy represents men as better, Comedy as worse, than in actual life.† Epic poetry agrees with Tragedy in so far as it is an imitation of characters of a higher type (*μῦθος σπουδαίων*).‡ The character (*τὸ ἦθος*) must be morally good (*χρηστὸν*). This is the primary demand of Tragedy. The 'character' is good, if the moral purpose is good. But we must note that there are different types of moral purpose. The goodness of a woman or a slave is not the same as the goodness of a man.* Aristotle, then, regards Epic poetry and Tragedy as dealing with types of character which are morally higher than those of actual life. There are various such types, depending upon certain fundamental natural differences—such as those between man and woman, free man and slave,—but they must in all cases be morally higher than those of actual life. This means, as he explains, that the moral purpose (*προαίρεσις*) must be higher. Now, as moral purpose is for Aristotle, 'correspondence with objective law,' not merely good intention, this is the same as saying that the characters represented must be more closely conformable with the ideal tendencies of human nature than those of actual life. If we bear this in mind, it becomes obvious that Aristotle is insisting that tragedy must represent moral types of character such as exhibit what are the fundamental laws of man as a being who can realise himself only by following these laws. We have further to bear in mind that he does not deny that immoral characters may be portrayed, but only demands that these should be necessary to the main purpose of the drama, viz., that rational enjoyment which is the end of art, and which can be fully secured only by the exhibition of the rational laws of human life. I cannot, therefore, see that Mr. Butcher is justified in regarding Aristotle as under the influence of the older view of art as didactic. No doubt he regards it as didactic in the wide sense that it produces a feeling of self-harmony, by exhibiting the play of character as manifesting the inevitable result of the violation of the deepest laws of morality as disastrous; but, unless we are to empty art of all ideal significance, we must accept this view of its purport.

**Ibid* ii., 1.†*Ibid* v. 4.*Ibid* xv., 1-2.

The limitations of Aristotle lie in another direction. They are due to his conception of moral excellence as possible only for those who are endowed by nature with special advantages, and by their position are capable of a moral excellence denied to others. Women and slaves, have, in his view, their own moral excellence, but they are essentially lower in type than the free man. This is inseparable from the Greek ideal of life. Hence Tragedy for him is not only the representation of higher moral types than common—which it must be—but its main purpose is the representation of those types which are of the highest moral excellence. Hence there can be for him no perfect tragedy, the central character in which is a woman or a slave; though we fail to see how he could reconcile this view with his knowledge of such a play as Sophocles' *Antigone*.

"Homer", says Aristotle, "makes men better than they are."* This means that the characters of Homer are of a larger mould, or display the ideal tendencies of humanity better than those of ordinary life. When we consider what Aristotle's conception of moral excellence is—that it consists in a nearer approximation to the ideal standard of free life—it must be obvious that there can, on his view, be no discrepancy between the poetical and the ethical point of view. The character which is poetically the higher is also for him ethically higher. Agamemnon, Ulysses and Achilles, are capable of a moral excellence to which the ordinary citizen cannot attain; they show what the ordinary citizen would be if he were as highly endowed by nature, and were placed in similar circumstances. It, therefore, seems to me that Aristotle is quite consistent with himself in his view of Tragedy as 'imitating' characters of a type morally higher than the average. To take any other view would be to abandon his whole conception of life as an "energy of the soul in accordance with the highest moral excellence in a complete life." It is only from a different conception of morality that we can criticise his aesthetic theory.

"The poet," we are told, "in representing men quick or slow to anger, or with other defects of character, should preserve the type and yet represent them as noble."† The *ἐπιεικής* is not absolutely perfect, but as perfect as possible: he is a good citizen, and what Aristotle says is, that the representation of men who

**Ibid.* ii. 3.

†*Ibid.* xv. 8.

are too quick or too slow to anger (too passionate or too phlegmatic) should not lead him to represent them as morally bad; *i.e.*, their permanent disposition must be good, though, if they are like Achilles hasty in temper, they may be temporarily led into what is not in accordance with the ideal of a noble man. I do not think it is a question of their 'being ennobled by poetic treatment,' as Mr. Butcher puts it: it is a question of *representing them as noble* in their character or permanent disposition, while not making them flawless. Achilles in Homer is passionate, but he is noble and unselfish: his passion is mingled with indignation at a public wrong, though it has in it an element of personal feeling. Without this element the action of the poem would not proceed. The poet thus represents men of high type, with the defects of their humanity. The idealisation is not the elimination of their humanity, but the representation of real men, placed under conditions which give full play both to their defects and their excellencies.

THE FUNCTION OF TRAGEDY.

Tragedy is thus defined:

"Tragedy is an imitation of an action that is serious, complete and of a certain magnitude; in language embellished with each kind of artistic ornament, the several kinds being found in separate parts of the play; in the form of action not narrative; through pity and fear effecting the proper purgation (*καθάρσις*) of these emotions."*

This definition has been explained in a great variety of ways. I shall give the latest, and, no doubt, the true interpretation, as expounded at length by Mr. Butcher.†

(1) Tragedy is an 'imitation,' *i.e.*, it agrees with all the fine arts in presenting, not real objects, but copies or representations of them. (2) It represents a 'serious action.' This is its distinction from comedy; it must exclude the ludicrous and morally trivial. This is in accordance with Aristotle's whole conception of Tragedy as representing men of like character with ourselves under conditions which reveal what we are ourselves capable of as men. Tragedy does not deal with men in their ordinary everyday life, but only with men who are placed in circumstances

**Ibid.* vi, 2.

†*Aristotle's Theory of Poetry and Fine Art*, chap. vi.

which call out their highest efforts. (3) The action must 'be complete and of a certain magnitude'; in other words, the whole series of events represented must constitute an organic whole; hence nothing can be admitted which is not significant. For tragedy is not history or biography; it is the selection of a series of events which constitute a whole for the imagination. And the action must be of a certain magnitude, *i.e.*, it must be of such a length as to give room for the development of the connected series of events which exhibit the law of human destiny. (4) The 'several kinds of embellishment' are verse and song; verse without music being employed in the dialogue, lyrical song in the choral parts. (5) Tragedy is distinguished from Epic poetry as being dramatic, not narrative. (6) So far all is plain sailing; it is the last part of the definition which has given rise to so much controversy. The function (*ξρηρον*) of Tragedy is "to effect, through pity and fear, the purgation of these emotions". (a) It is now admitted that *καθαρσις* is a metaphorical term, transferred to poetry from medicine. As medicine removes from the body certain morbid humours and brings it into its normal or healthy state, so Tragedy removes from the soul a morbid element and enables it to return to the balanced state of self-harmony. (b) To understand Aristotle's view we have to see clearly what he means by pity and fear. Both pity and fear, as experienced in real life, contain an element of pain (*λ'πη τις*). Fear is a species of pain or disturbance arising from an impression of impending evil which is destructive or painful in its nature.* The pain is connected with oneself, and the evil is imagined as close at hand. Pity is a sort of pain at an evident evil of a destructive or painful kind in the case of somebody who does not deserve it, the evil being one which we might expect to happen to ourselves or to some of our friends, and this at a time when it is seen to be near at hand.† Thus fear is connected with oneself, pity with others, though indirectly it is connected with oneself, by the idea that we as men might be placed under similar circumstances. In Aristotle's use of terms, therefore, 'pity' is not the emotion of disinterested sympathy: it has in it an element of egoism, so that the pain we feel for others gets its edge from its relation to ourselves. It is important to bear this in mind; for

**Rhet.* ii, 5.

†*Ibid.*, ii, 8.

this egoistic element is the morbid part which Tragedy has to purge away. Further, pity turns into fear when the object is so nearly related to us that the suffering seems to be our own. Pity and fear, are therefore correlative: we pity others, where, under like circumstances, we should fear for ourselves. Those who are incapable of 'fear' are incapable also of 'pity'.*

How, then, does Tragedy effect the purgation of 'pity' and 'fear?' It does so by connecting these emotions with ideal characters, who are not actual persons but exist only in the realm of imagination. The pity which we feel is not of that personal character which is inseparable from the emotion as experienced in actual life. What excites our pity is the misfortune, not of a particular individual, but of an ideal character, who represents humanity as a whole. Hence the 'fear' excited by the tragic spectacle is also universalised: we tremble for ourselves, because we identify ourselves with the hero in imagination; so that 'fear' becomes the universalised emotion of pity for all men, including ourselves. The whole tragic effect thus depends upon the imaginative identification of the hero with ourselves. He, too, is a man, with the same essential qualities, the same defects, the same possibilities of happiness or misfortune as ourselves. In the representation of the destiny of the tragic hero, we see our own destiny, 'writ large', or exhibited from a universal point of view. Thus the exhibition of 'pity' and 'fear' by the tragic spectacle is at the same time the enlargement or idealisation of 'pity' and 'fear' as personal experiences, and this effects the 'purgation' of the painful element; so that the result upon us is one of self-harmony.

Aristotle draws a clear line of distinction between art as an instrument of education for the young, and as a means of enabling citizens of a mature age to retain that well-balanced activity, which constitutes virtue. In this latter connexion he has occasion to consider the influence of melodies which purge emotion by first exciting it. Aristotle had observed the effect of such melodies on that form of religious ecstasy, which the Greeks called 'enthusiasm'. By means of a wild and restless music the internal trouble of the mind was soothed, so that those subject to such transports "fell back into their normal state, as if they

**Ibid.* ii, 8.

had undergone a medical or purgative treatment." Aristotle, however, holds that in a less degree "those who are liable to pity and fear, and, in general, persons of emotional temperament, pass through a like experience: they all undergo a *κάθαρσις* of some kind, and feel a pleasureable relief." Now, this view explains how Aristotle was led to his conception of tragedy. The pity and fear excited by it is analogous to religious enthusiasm, and may be cured in a similar way. But in tragedy, there is the further element of a distinctively aesthetic satisfaction, dependent upon its idealising or universalising influence. In Aristotle's view, therefore, tragedy is educational in the wide sense of the term; it acts upon the cultured citizen in a way similar to that in which music, as employed in the education of the young, has an influence upon their character. Moreover, the effect which it produces could not be attained in any other way; for, if the emotional nature is to be transformed, this must be done by first calling it into play. It is thus obvious that art is, in Aristotle's theory, an indispensable element in the preservation of that noble life which constitutes the end. When we add to this, that no tragedy can produce the true *κάθαρσις* which is not the embodiment of a high ideal of life, it becomes obvious that art, morality and religion must be in essential harmony with one another; and that art of an ignoble type is excluded, because it is at once bad art, and bad in its moral and religious influence.

Holding that tragedy produces its peculiar effect by the purgation of pity and fear, Aristotle is led to maintain that only certain types of character can be admitted. (1) In the first place, the representation of a man preeminently good, undergoing the change from prosperity to adversity is not tragic, but shocking (*μαυρόν*), and is, therefore, not a fit subject for tragedy. (2) Nor can we allow the representation of the wicked man as passing from adversity to prosperity; for here, not only are pity and fear absent, but our sense of justice is unsatisfied, and the feeling aroused is one of moral indignation. (3) The overthrow of the utter villain is not tragic, though it gives satisfaction to the moral sense. The main character in a tragedy ought, therefore, to be a man like ourselves, who is involved in misfortune through some great flaw of character or fatal error in conduct. And he must be illustrious in rank and fortune, in order that the signal nature

of the catastrophe may be more strikingly exhibited. (4) Aristotle further implies that the representation of the good man as passing from adversity to prosperity is not a proper subject of tragedy, though, 'owing to the weakness of the audience,' such a play will be generally preferred. Such a motive is very proper in comedy.

When we test the actual dramas by the canon thus laid down, it is impossible to deny that they transcend the limits within which Aristotle would confine tragic art. We have here, in fact, a phenomenon which meets us in the whole course of aesthetic criticism. The creative impulse of poetic genius, stimulated by the enlarged conception of the world which each new age brings with it, will not conform to the narrow limits within which the theorist would confine it.

Aristotle denies that tragedy may represent the *ἐπιεικής*, or preeminently good man, as overcome by misfortune, maintaining that such a spectacle is 'shocking' to the moral, or, as we might even say, the religious consciousness. Yet he had before him one of the most perfect dramas of ancient times, the central character of which was of the type excluded. Antigone is a perfect character, and her crime, as Sophocles says, is a 'sinless crime.' Critics, like Gervinus, who can persuade themselves that the Cordelia of Shakespeare's *Lear* merited her fate because she was deficient in 'wise and prudent foresight,' might easily find that Antigone was deficient in that sweet persuasiveness which would have conciliated Creon; but every healthy reader, without an *a priori* theory which has to be maintained at all costs, will frankly recognise that Sophocles violates the Aristotelian canon. Yet the *Antigone* does not cease to be tragic, though it escapes from the limits assigned by Aristotle; nor does it offend our sense of the rationality of divine law. And the reason seems obvious. The poet has lifted us entirely above the region of the actual world of established law, making us feel that all law has its ultimate resource in reason. Here in fact is a case in which poetry has trampled upon the narrow limits of the Greek state, and presented in moving form the principle which has created and impelled the onward march of humanity. This idealising power almost abolishes the limits of Greek thought, and the total effect is one of assured confidence in the triumph of divine

law, when it comes into collision with human law. Thus the *Antigone* is perhaps the one play of the best classical period in which we feel entirely at home. We are not shocked, but elevated, by the tragic ruin of Antigone, because we feel that the divine principle of the world is on her side. It is, perhaps, not too much to say that the *Antigone* only falls short of the Christian conception of life in the absence of that joyous self-sacrifice which the Christian martyr has displayed. There is still in the work of Sophocles rather the heroic sacrifice for a principle which cannot be denied than the overpowering consciousness that the principle, "Die to live," is the very essence of the divine nature.

With Aristotle's second limitation, that tragedy may not represent the villain as passing from adversity to prosperity, we feel ourselves more in unison. But even here we should be disposed to draw a distinction. The prosperity of the wicked will not of itself yield the tragic satisfaction; but it may do so, if it is so represented as to reveal the spiritual failure which is involved in seeming triumph, for in this case there is revealed to us the inevitable operation of the law that in wickedness there can be no real triumph.

Aristotle's third case, that of the overthrow of the utter villain, is at once disproved by Shakespeare's *Richard III.*, where we have an instance of a tragic spectacle which results in the most complete aesthetic satisfaction. To defend the Aristotelian definition of tragedy, we have, therefore, to free it from the limits imposed upon it by its author. Our satisfaction arises from the representation of a character who struggles against the law of humanity with unexampled power and intelligence, and yet is inevitably brought to ruin by the spiritual forces which he violates. Such a conception, I think, could not have arisen prior to Christianity; for it was Christianity which revealed to men that good must triumph, whenever it is brought face to face with unredeemed evil.

The result, then, is, that Aristotle's definition of tragedy can only be regarded as the germ of the modern conception, which may be expressed in the words of Bernays, as "an enlargement by sympathy of the individual self into the self of humanity"; but with this more comprehensive conception, we reach a

“generalised conception of tragic motive which is applicable to any serious portrayal of life, however romantic, however fearless, however free from external collision or catastrophe”: it will apply to Browning’s *Ring and the Book*, not less than to Shakespeare’s *Hamlet* or *Othello*; it will not even exclude a poem like Carlyle’s *French Revolution*. Such an extension of the Aristotelian formula may, however, be regarded as the inevitable development of the Christian idea of life, which enables us to find in all human beings, whatever their rank or character, the elements of the one fundamental struggle between the principle of goodness and the principle of evil,—a struggle which has its seat and origin in the innermost recesses of the human soul. Thus, not only the content but the form of the drama may be broken, as it is in Browning’s ‘poetry always dramatic in principle’, while the essential spirit survives; and it may even be questioned whether the old form of the drama can be made adequate to the more spiritual content of modern ideas.

MEDIEVAL ART.

With the advent of Christianity a new spiritual principle was introduced into the world which could not fail in the long run to transform art, as well as the moral and religious consciousness of the individual and the basis of the state. In the second century of our era, during what has been called the ‘minor peace of the Church,’ the Christian consciousness seems to have reflected in a joyous, spontaneous fashion, “the eternal goodwill of God to man, in whom, according to the oldest version of the angelic message, he is well pleased.” There are some verses quoted or written by Clement of Alexandria, in which expression is given to the feeling that the external universe shares in its degree man’s relation to the Creator. Here we have an expression of the idea that all things manifest the divine goodness. This feeling seems to have survived down to the fourth century, and then to have become broken by a consciousness of the imperfection and littleness of man and all his works. This negative element became more and more emphasised as time went on, and gave rise to that dualism of which we find the final expression in Dante, though the spirit of reconciliation animates the whole of the *Divina Commedia*.

Dante’s great poem is a striking instance of the inseparable

connexion of art, morality and religion. It is an absolute refutation of the shallow doctrine that poetry can ever be indifferent to truth. For Dante the revelation of eternal truth is the dominant aim, and the mould in which his work is cast is simply the necessary vehicle for its content. Yet Aristotle was right in maintaining that poetry must be direct, concrete and sensuous. When we read Dante's description of the *Commedia* it seems at first sight as if he had violated the fundamental canon of poetry, that it should be "simple, sensuous, passionate." 'Passionate,' it no doubt is, but can we call a poem 'simple' or 'sensuous,' the aim of which is thus stated? "In order to a clear understanding of what I am about to say," Dante writes to Can Grande, "you must know that the sense of this work is not simple; rather the work might be called 'of many senses.' For there is one sense which is got from the letter, and another which is got from the things signified by the letter; and the former is called literal, the latter allegorical or mystical. This mode of treatment, for the better understanding of it, may be considered in the case of these verses: 'When Israel came out of Egypt, and the house of Jacob from among a strange people, Judah was his sanctification and Israel his dominion.' For if we look at the letter alone, there is signified to us the exodus of the children of Israel from Egypt in the time of Moses; if at the allegory, our redemption by Christ; if at the moral sense, the conversion of the soul from the grief and misery of sin to a state of grace; if at the anagogic [elevating] sense, the exodus of the holy soul from the bondage of corruption to the liberty of eternal glory." Not only in this letter, but during the course of the poem Dante frequently directs our attention to the 'subtle veil' by which his deeper thought is 'half concealed and half revealed.' The explanation is that the other world which he reveals to us is the symbol of the spiritual forces which are ever in operation in the soul of man—that eternal war between good and evil which constitutes the real life of man. As Greek tragedy lifted the individual above the confusion and triviality of ordinary life by the representation of heroic figures, in whom the ideal tendencies of human nature were manifested; so Dante, by his picture of the state of souls after death, gives us the most vivid representation of the ultimate tendency of evil, the process of spiritual purification, and the om-

nipotence of goodness. Greek tragedy exhibited the conflict of human wills with external forces, or the ruin which befel a great nature from some radical defect or moral flaw; Dante, with absolutely no respect for persons, exhibits men solely as they appear in the pure aether of the eternal world, where nothing counts except the spiritual nature as evil, repentant or good. By thus reflecting human action upon the background of the eternal or spiritual world he is enabled to strip off all the adventitious wrappings which in actual life confuse our judgments, and to appraise men's deeds by an absolute standard. Yet he never loses for a moment the definiteness and pictorial accuracy which poetry demands. This combination of poetic and spiritual truth, under conditions which made it seem *a priori* impossible, shows what a potency lies in a great original genius to transform the most intractable material.

MODERN ART.

When we pass with Shakespeare to the modern world we feel at once what a revolution has taken place. The double world of Dante has disappeared, and with it the allegorical and mystical meanings which are inseparable from the structure of the *Divina Commedia*. It is as if we had emerged from the portals of a cathedral, with its dim religious light, its harmonies of form and colour, and its impassioned organ notes, into the wide spaces and the joyous sunlight of the real world. Our first impression in reading Shakespeare is apt to be that the whole religious spirit of the middle ages has vanished away, and that we are in the presence of a mere man of the world who "cares for none of these things." We feel, in fact, as if we had returned to the directness and fresh interest in life, which was characteristic of the ancient world. It would, however, be an entire mistake to suppose that the modern and the ancient world are on the same plane. The relative simplicity of an earlier age can never return: there is no going back in the great movement of humanity; what seems a return being really a parallel movement on a higher plane. The long toil of the middle ages was the necessary stage through which the western world had to pass in order to escape from barbarism, to assimilate the culture of Greece and the political civilization of Rome, and to become saturated with the spirit of Christianity. This process is pre-

supposed in the dramas of Shakespeare. The transforming influence of Christianity is not at first obvious, because it has penetrated so deeply. The tragic motive in Shakespeare has broken through the boundaries of Greek art, and the divine meaning of the world is extracted even from representatives of pure evil like Richard III, and is more obviously exhibited in such pictures of Christian womanliness and strength of principle as Cordelia, whose spirit triumphs even in her death. Once more we find that poetic perfection is inseparable from ethical and religious content. Shakespeare has a deeper faith in the principle that 'morality is the nature of things' than any Greek poet; so deep a faith that he can see it exhibited in a Macbeth, a Lear, and a Hamlet.

That Shakespeare, with his unerring instinct, consciously rejected the dualism of the middle ages, even in the form of his work, is evident from the light and easy way in which he dispenses of the formalism, the double meanings and the mysticism of the middle ages. Conscious allegory, which was inseparable from the form of Dante's work, is for Shakespeare a form of medieval pedantry. The formal law of identity, which the scholastic logicians maintained to be the fundamental principle of thought, is disposed of by a quip of the Clown in *Twelfth Night*:

Clo. Bonos dies, Sir Toby; for as the old hermit of Prague, that never saw pen and ink, very wittily said to the niece of King Gorboduc, "That, that is, is," so I, being master parson, am master parson, for what is that, but that? and is, but is?"

Shakespeare's own theory of dramatic art is expressed by Hamlet:

"For anything so overdone is from the purpose of playing, whose end, both at the first and now, was, and is, to hold as t'were *the mirror up to nature*: to show virtue her own feature, scorn her own image, and the very age, and body of the time, his form and pressure."

It is obvious that we have here a clear expression of the doctrine, that the object of dramatic art is to represent human life as it actually is. At the same time, Shakespeare implies that it is not a mere servile copy of the actual: the 'form and pressure of the time,' *i.e.*, the whole spirit or tendency of the age, is the object of aesthetic imitation. Thus Shakespeare at once brings us back to the present world as the true object of poetry, and in-

sists upon the necessity of its ethical content. The infinite value of the human soul and the eternal significance of human life underlie the whole of his work ; but, whereas in Dante this could only be represented under the form of another world, in Shakespeare it operates by giving an added force and tenderness to the penetrative imagination. The spiritual aspect of life has not disappeared, but it has ceased to be a separate and independent world. Here and now, as Shakespeare implies, man may live in the eternal : his destiny for weal or woe is determined by his character as manifested in his deeds, not by any pressure of eternal circumstance.

The spiritual significance of the actual is therefore the burden of all modern art, worthy of the name. Man's real warfare is not with principalities and powers, but with himself ; and he is the truest artist who most powerfully and accurately exhibits the meaning of this warfare. This is the sense in which art is ideal. Its identity does not consist either in the creation of a vague and fantastic world, or in the mere imitation of the world as it appears to the prosaic understanding, but in penetrative insight into the human heart and human life. The contrast of Realism and Idealism in art is false : the true real is the spiritual significance of the actual, and this is the ideal. From this point of view there can be no opposition between art, morality and religion. There is, indeed, a distinction, but it is one that rests upon their perfect harmony.

When it is said of Shakespeare that his work is penetrated by the spirit of Christianity, this claim is not inconsistent with the fact that it was after a long and severe process that he came to the explicit consciousness of the true meaning of life. For we must remember that the Christian life admits of many degrees of complexity. In simple natures, where the elements are least mixed, and the conditions of life are also of the simplest kind, faith in God and the triumph of goodness seems to come almost by nature. On the other hand that faith is of a rare and child-like character. Just as there is a unity in the unspoiled child, which is the image of the higher harmony of the developed man ; so there are Christians whose life has hardly ever been ruffled by doubt or despondency, and who, therefore, pass almost without effort from the natural to the spiritual life. Such types become

more and more rare with the deepened reflection and self-consciousness of the modern world, and are found, perhaps, only in natures of remarkable natural sweetness and simplicity,—and above all among women, such as Shakespeare loved to paint, in whom purity, gentleness and tender sympathy are as spontaneous as refined and moving grace. Shakespeare himself was not of this child-like type of character. His superabundant vigour of body and soul, and his poetic sensibility to all that makes for a full and free life, made it impossible for him to reach self-harmony without passing through a hard and varied experience; and in his work we can see clear traces of the process. The man who was as much at home with Falstaff as with Hamlet, with Gratiano as with Lear, was so many-sided in his sympathy as to seem “not one but all mankind’s epitome.” But it is this very fact which gives such importance to the conception of human life which he was led to form. Every man of genius in a sense begins *de novo*: nothing has meaning for him except what he has himself experienced; and it is this originality which marks him off from the ordinary man, who, to a large extent, lives in the traditional and customary. In Shakespeare, the greatest dramatic genius the world has ever seen, this is true in a pre-eminent degree: he lives over again the life of the race, and by the force of his imaginative sympathy he runs through the whole gamut of experience which in others is broken up into fragments. Now, this makes the experience of such a man of supreme significance. The Christian consciousness is in its fundamental character the same in all men; in all it consists in the consciousness that we must die to live,—that the purely individual self must be transformed by identification with the divine; but the lesson of life through death to the lower self has a shallower or a deeper meaning according to the breadth and complexity and energy of what is transformed. If, therefore, we find that Shakespeare, after testing the whole experience of the race, reaches the conclusion that the world is divine, in the sense that nothing can withstand the omnipotence of goodness, we have one of the strongest proofs that Christianity, which alone embodies this faith, rests upon the eternal truth of things. This is a proof of the divine nature of Christianity, of which Apologists do not seem to have felt the force,—mainly, I suppose, because they have confused the acci-

dents of the Christian creed with its imperishable essence. What then, is the sum of Shakespeare's teaching? It is not his way to express his conclusion in an abstract formula; but, if we follow him, as he represents character after character, it cannot be doubted that he declares the world to be based upon the principle that evil always results in spiritual disaster, and goodness is always triumphant over even the worst forms of evil. Such a testimony, coming from one who was no ascetic, no narrow-minded bigot, no intellectual weakling, has a convincing force which cannot be surpassed. For it is spontaneously given by a man of entire veracity, who was no stranger to the evil of the world; to one who had sounded the deepest depths of pessimism, and, as we see from *Timon of Athens*, passed through a stage in which for a time the world seemed to be given over to vileness and corruption—to be, in fact, a world in which the terrible word seemed literal truth, that "God was dead." Nothing can exceed the bitterness disgust of life and pessimism which permeates this play; and we may conjecture from its unfinished state, that, even in writing it, Shakespeare had already gone beyond it and felt that he had transgressed the limits of art and truth. At any rate, it was but a point of transition through which he passed; and we have in *Cymbeline*, the *Winter's Tale*, and above all the *Tempest*, generally admitted to be the last of his plays, the large imaginative sympathy which enables him to enter with kindly appreciation into the youthful love of Ferdinand and Miranda, and to make open confession of an optimistic creed. The outbursts of passion are gone, and in their place we have the highest religious emotion, which does not despise all earthly life, but reviews it in the light of the eternal. As has been beautifully said: "The man who most profoundly measured all the heights and depths of human nature, and saw most fully all the humour and pathos, all the comedy and tragedy of the lot of man upon earth, was not embittered or hopelessly saddened by his knowledge, but brought out of it all in the end a serene and charitable view of existence, a free sympathy with every joy and sorrow of humanity, and a conviction that good is stronger than ill, and that the great soul of the world is just."*

*E. Caird, *Crit. Rev.*, Decr., 1896, p. 834.

But, though Shakespeare summed up the past, presenting it in all its variety and living power, he did not exhaust the whole experience of man, leaving nothing for his successors to do. There can be no finality in poetry, any more than in science or philosophy, for the simple reason that humanity is always in process. After Shakespeare comes Milton; and Milton, though not of his predecessor's regal rank, has something to tell us which we cannot learn from Shakespeare. The Renaissance and the Reformation began the work of liberating man from the weight of tradition and external authority, but they did not in the first instance liberate him from the despotism of the State. It was the sovereign, and not the body of the people, who was the embodiment of the universal will. Shakespeare's political ideal was that of a puissant nation, throwing off all foreign allegiance, political or ecclesiastical, and this ideal he embodied in a heroic King like Henry V, fitted to lead its armies against a foreign foe. It was only in the age of the Stuarts that the demand for absolute civic and religious freedom broke out; and of this new movement Milton is the spokesman as Cromwell was the hero.

In the present century, there was a new poetic movement which is not represented by Shakespeare. That he was not insensible to the life and beauty of nature, there are numerous passages in his works which abundantly testify; but his main interest was in human life, and in human character in its more complex phases. Shakespeare is an impassioned patriot, but he has nothing but contempt for a democracy. In Wordsworth we have a poet who, as Goethe said of Winckelmann, has "provided a new organ for the human spirit," or, in his own words, has "widened the sphere of human sensibility." Like Dante he regarded himself, not as the idle singer of an empty day, "but as one who had a sacred message to deliver." "Every great poet," he says, "is a teacher. I wish to be considered as a teacher, or as nothing." Interpreted in the wide and liberal sense, the claim of Wordsworth was substantiated. "Poetry", as he says, "is the breath and finer spirit of all knowledge; it is the impassioned expression which is on the countenance of all science." In his youth he was a strong partizan of the Revolution, because of his faith in man and his indifference to all the external disparities of rank and circumstance; and because of this inextinguishable faith, he

became the poet of the Reconstruction. His great work is to make us feel the unity of nature, as when he tells us, speaking of the boy on Windermere, that

"A gentle shock of mild surprise
Has carried far into his heart the voice
Of mountain torrents."

Thus he discloses the unity of spirit which speaks in man and nature. Similarly, he is the poet of the "primary spiritual interests of human life," of the

"Joy in widest commonalty spread.

"The worth of man's life is not to be measured by difference of culture any more than by difference of rank or wealth." Wordsworth has faith in the unity of humanity and the continuity of its development; he believes that there is

"One great society alone on earth
The noble living and the noble dead."

And finally, like all great poets, he has the optimistic faith that good is stronger than evil:

"Sighing I turned away; but ere
Night fell I heard, or seemed to hear,
Music that sorrow comes not near—
A ritual hymn,
Chanted in love that casts out fear
By Seraphim."

In this rapid survey my aim has been to show that the best poetry and the best aesthetic criticism agree in regarding art as inseparable from its spiritual content. While poetry must always be concrete, it must at the same time be an embodiment of the meaning of nature and of human life, or it will fail to produce the aesthetic effect of self-harmony. We have also seen that, as man develops, the significance of life becomes ever deeper. Greek art seems at first sight to effect the reconciliation of morality and religion with art, in a way that is not possible for the modern poet, in whom the division between the actual and the ideal has been stretched to its utmost limit. But, when we look more closely, we discover that the reconciliation could not be permanently satisfactory. Aristotle, in order to reconcile the aesthetic with the reflective consciousness has to fall back upon the unsatisfactory doctrine, that poetry must accept the popular con-

ception of the Gods; in other words, that its truth is of a kind inferior to the truth of philosophy. For, as in him God is a Being beyond the world, who is wrapped in self-contemplation, the world is a sphere in which finitude and contingency prevail, and the most that we can say is that each thing and especially each human being is continually striving after a completeness to which it can never attain. The relative perfection of man is therefore dependent upon chance and fortune, and is liable to suffer eclipse from the interposition of the unforeseen and incalculable. With the advent of Christianity a new principle was introduced, which brought the divine and the human into immediate union. There is no real contingency in the world; but all things proceed from and manifest the divine. At first this consciousness is expressed in a narrow way; but, as the long struggle between barbarism, unbridled passion, ignorance and selfish ambition is met by the stronger influence of Christianity, the antagonism of this world and the next, secular and sacred, nationality and empire, reason and faith, is emphasised; and when Dante seeks to give it poetic expression he is forced to seek for a reconciliation of the human and divine in the construction of a supersensible world, which seems to be in absolute contrast to the actual. The reconciling spirit of Christianity, however, could not be entirely lost, and hence we find that, in effect, his picture of the state of souls after death is an image of the deeper meaning of life here and now. With the modern world, the dualism of the Middle Ages is transcended in principle. Shakespeare finds in the actual life of man on earth the key to the true meaning of the world; and his successors merely deepen and give new applications to the principle which he has re-discovered—the principle once for all proclaimed by our Lord, that he who saves his life shall lose it, and he who loses his life shall save it. If our survey has done nothing else, it may at least confirm us in the faith that man can be at unity with himself only as he is in unity with God. Poetry, by its universalising power, and its capacity of lifting us above the confusion of the immediate, enables us to see that, while each of us can do little in himself to help on the race, that little has an infinite value when it is viewed as a factor in the process by which God enables the race to 'work out its own salvation.' Thus the highest art, like the best philosophy, teaches us that man may make himself eternal,

and enables us to transcend that fretful and despairing pessimism, which would lead us to believe that

“Life’s but a walking shadow, a poor player
That struts and frets his hour upon the stage,
And then is heard no more.”

When we see, as our great poets teach us to see, that we are “fellow-workers with God”, we may surely enter upon our little tasks with the assured confidence that all work done in the fear of the Lord has an infinite value. Great problems, theoretical and practical, still lie before the race. We are far from having solved the difficulties, social and political, which the enlarged sympathy of modern times sets before us; but, with the faith which comes from a comprehensive survey, we need be neither impatient nor despairing. The time must come when all men shall, in a more real sense than now, be the ‘Lord’s freemen’; and we, who have inherited the fruit of the long toil and travail of the past, owe it to our brethren yet to come to purify our own lives, and bring all the institutions of society into more complete harmony with the spirit of Christianity, which is the revelation of the inmost nature of God.

JOHN WATSON.

THE THOUSAND ISLANDS.

‘Tis here, ‘tis there a dot,
A lovely spot
With beauty fraught,
For painter’s easel what a scene,
For poet’s fancy what a dream,
Ye islands seem!

QUEEN'S QUARTERLY.

Or near, or far ye lie
 'gainst heaven's blue sky,
 Or low, or high,
 With inlets stretching cool and deep,
 Where playful wavelets gently creep
 To kiss your feet.
 Now large, now small ye are,
 Yet fair, aye fair
 Beyond compare ;
 All decked in Summer's livery green,
 The brown rocks peeping through between
 The birch-tree's sheen.
 With grace and ease ye ride
 In tranquil pride
 Upon the tide
 Whose gentle ebbing seems to lave
 Your shores, and benediction crave
 With every wave.
 The birds their sweetest song
 Sing all day long
 Your trees among.
 They love your undisturbed bowers,
 They love to kiss, in golden hours,
 Your wildwood flowers.
 And in your channels deep,
 Which fret and sweep,
 Or rest in sleep,
 The perch and sun-fish flash their sides
 With richest gold of sunbeam dyed,
 And pickerel hide.
 Ah ! here that I might drift ;
 I might dream and drift
 For aye ! Nor lift
 The veil beyond, where fancy's spell
 Surrounds each rock-bound citadel,
 Where wood-sprites dwell.

HELOISE DUPUIS TAYLOR.

CURRENT EVENTS.

REFLECTIONS on the late Spanish-American war are naturally much in vogue, and they are not all without profit. Doubtless the Americans may be said to have accomplished their object. Yet the object as it emerges from the war as little resembles that which went into it, as the troops returning from Cuba are like those who went there. The declaration of the United States Congress with reference to their brief and disinterested purpose in Cuba, like the English pledges to quit Egypt, has been added to the things which the nation will have to live down. The Americans went into Cuba to save the Cubans from the Spaniards, an act of philanthropy very needful; they have discovered that they will have to remain there to save the Cubans from themselves, an act of philanthropy still more urgent. Let us hope that the burden of the United States Government will not be increased by the necessity of saving its wards from the Americans.

The discovery that the Cubans, or the inhabitants of other Spanish possessions which the United States may hold, are quite unfit for self-government is not necessarily ground for adverse criticism of the action of the United States in liberating them from Spanish rule. To avoid such criticism, however, the Americans must not abandon them to self-government, or give them no better than Spanish rule.

To give good government to the late Spanish possessions is the real pledge which the United States has given to the civilized world. Considering the past and present of those regions, the American republic has taken upon itself a very onerous and delicate obligation. Those Americans who are clamoring most loudly for the retention of all the late Spanish possessions, with a single eye for the wealth to be gathered from them, have no idea of the gravity of the task assumed. Success or failure will shed lustre or cast shadows upon the whole nation, but the glory or the shame will belong directly to the executive, a department of the American system which is now to be tested in quite new ways. Meanwhile another result of the war has been specially agitating the Union, namely the breakdown which occurred in the commis-

sariat and medical departments. As in the case of similar conditions in the Crimean war, or the mismanagement of our own Northwest fracas, the failure may be attributed to the unpreparedness and inexperience resulting from a long peace. Compared with the perfect management of the Soudan campaign just ended the defects are very glaring. But deplorable as the results have been for the American soldiers, there is still some grain of comfort winnowed by this ill wind. To the great mass of unreflective Americans the felicitous close of their highly successful campaign against the Spaniards would have brought the idea that war was a glorious, patriotic and elevating occupation. We should have had a very deluge of jingoistic editorials, proving the most infallible connection between war and all the virtues which sustain our frail humanity. But the wail which has gone up over lost and shattered lives has put a severe check upon all that. The people have been reminded with cruel frankness that war is laden not with airs from heaven but blasts from hell.

The far Eastern question which has been passing through so many phases of late has been particularly exercising the English jingoes. They have been accusing the Government of craven heartedness, ignorance, want of policy and all manner of incapacity. At the same time their own declarations of policy afford good grounds for thankfulness on the part of sober-minded Britons in all parts of the Empire, that these ultra-imperialists are not burdened with the direction of the nation's foreign affairs. These forward persons are abundantly supplied with vigorous ultimatums which ought to be presented in the initial stages of every delicate discussion with a foreign power. They are particularly certain as to the course to be followed in every new partition of the heritage of the heathen. Britain having obtained so much of that heritage in the past, the impressionist school of imperial politicians are apt to assume that the Empire stands related to the heathen as their only legitimate heir-at-law. Even should there be any collateral heirs they must be required to adopt British methods in the management of their portion of the estate.

That the British method of managing such estates is by far the best, doubtless no reasonable person would care to deny, un-

less, indeed, we are to admit that Russians, Germans, Frenchmen and some others are reasonable persons. At the very least we may assume that those who doubt the superiority of this method are mistaken. But then there is always some difficulty in convincing them of their mistakes, and it may be doubted whether an early and vigorous ultimatum, with the immediate prospect of abandoning logic for bloodshed, is the most educative influence which can be brought to bear upon them.

Meanwhile that perverse little-Englander, Lord Salisbury, who after all probably knows more than the forwards about the needs of the Empire and the possibilities and impossibilities of diplomacy, has been managing the foreign affairs of the nation with great calmness. He has forborne to convince the world at the point of the sword of the superiority of the English methods of conducting foreign trade. In the case of China, if the other nations interested cannot be brought to keep open house there, he will adopt a give and take policy, which will recognize spheres of influence, and permit each power to administer its prospective inheritance as it sees fit.

At present, however, the most anomalous feature of the Chinese situation is that the nations engaged in staking out claims in China are not yet dealing directly with each other. The Chinese government is still recognized as legally in possession.

The powers are thus in the awkward position of rival suitors for the hand of a fickle heiress whose virtue is not above suspicion. Considering the artifices necessary to successful wooing, it is doubtful whether the nation which has most success or the one which has least will have more cause to feel humiliated. But whatever the final outcome of the Chinese entanglement may be, Lord Salisbury's record as a foreign minister gives ample assurance that the permanent interests of the Empire will be maintained with a minimum loss of national self-respect.

The success of Britain as a self-governing power at home, as the mother and patron of flourishing self-governing powers abroad, and as the administrator of foreign dependencies of all grades of inferior civilization, and all this without a protective tariff, without military conscription, and without entangling alliances, is a standing occasion of sur-

prise, envy and even irritation on the part of the other nations of Europe. To most European statesmen Britain is the embodiment of the impossible. Thus, apparently on most points and really on some, she is a standing criticism of their system. Naturally, therefore, as much to justify themselves to themselves as in answer to their own critics, they seek to belittle the British success. Elaborate articles are penned by continental writers, some seeking to prove that Britain occupies a position of great weakness, without allies, and without adequate means of defence for her scattered possessions and still more scattered trade, others to prove that this ambitious grasping, and perfidious power threatens the prosperity of every other nation, and if not checked may eventually swallow the whole earth.

The fact is that Britain has for the most part, in practice if not in theory, proceeded on the very sound principle that the normal condition of national life is one of peace, industry, commerce and self-expression generally, with a minimum regard for theoretical possibilities of destruction by international lightning and tempest. If in the past Britain, like some other powers, had spent her substance in elaborate preparations to meet possible combinations and attacks she would never have been in a position to excite as she does to-day the flattering envy of Europe. Several other nations of Europe, with greater natural resources and equal prospects, are burdening themselves to the utmost degree in preparation for some great Armageddon which each is afraid to begin, but the precipitation of which each daily dreads and strives to be prepared for. Beyond individual efforts extra strength is sought in alliances, which themselves involve bonds and sacrifices and are immediately met by counter alliances. Britain alone of the first rate powers has of late escaped most of the burdens of war during peace, and all the bonds and sacrifices of alliance. Yet there is always more or less of a clamorous and pessimistic element in the nation to whom the continental method represents the true national ideal, neglect to follow which threatens the Empire with black destruction. From this section comes, among other sounds, the cry for alliances and the efforts which we find to drive an understanding with Germany on special matters, or improved family relations with the United States over into a military alliance.

England prospers through being on speaking terms and in business intercourse with every nation. To commit herself to any alliance would destroy this enviable attitude in as much as it would involve a more or less specific declaration of hostility to certain other nations. An alliance directed against no one in particular is meaningless; none such exists and none such is seriously proposed. Though those who are striving to commit Britain to alliances are by no means agreed in their choice of an ally, yet all are as very specific as to the nation or nations against which their alliances are to be directed. To thus formally declare a settled hostility is surely unwise, and justifiable only when no other attitude is possible.

But England is in no such extremity. Just because she stands apart from the definite hostilities of Europe, she is liable to be alternately courted and threatened by the powers with a freedom they dare not use to each other. Neither France, Germany, nor Russia, would care to drive Britain to extremities. Though, owing to her myriad interests in every corner of the world, causes for dispute with each are never wanting. Yet none of these causes can ever compare with the importance of mutually checking each other. At most Britain threatens only some minor, outward interest of the continental powers, while they threaten each other's very national existence.

Certainly it would be a very unwise policy on the part of Britain to rudely provoke any of the other powers, as her interests are manifestly served by being at peace with all nations. It is her place to cultivate good understanding and commercial intercourse, to develop mutual obligations and common interests, thus leading the nations by self-interest not antagonizing them by threats. Standing in untrammelled freedom, but not in isolation, in harmony with all, but in alliance with none, is undoubtedly the ideal position for Britain and the Empire in international politics.

Again anarchy has startled the world by one of the most dastardly and meaningless of crimes, the murder of the Empress of Austria. To most people this monstrous deed will appear so thoroughly inane that insanity alone would seem to explain it. Yet, though perhaps appearing to the more enlightened anarchists as the result of mistaken zeal,

to the rank and file of those who profess anarchistic doctrines this deed will not appear more wanton or savage than the slaying of some heartless tyrant to the normal citizen of former times.

The Anarchist has persuaded himself that all the misery, wretchedness and evil in the world are directly due to the present supremely unjust organization of society. To the more ignorant Anarchist, encouraged, it is true, by the teaching of his leaders, this injustice is concretely embodied in those who hold places of distinction in official society. As a matter of fact, even rulers who actually govern are by no means the embodiment of the present order of society, and their destruction would have no necessary effect upon its character. But the rank and file of Anarchy, like great numbers of men in the case of more harmless beliefs, adopt and hold their views by faith not by knowledge. The practical Anarchist is quite sure that the only way to bring about universal peace and happiness is to rid the world of its rulers, preferably its important ones first and the lesser ones afterwards, yet each removal counts. It is quite true that the latest victim, the Empress of Austria, had practically nothing to do with the political affairs of her own country, much less of Europe. Yet such a statement would doubtless appear ridiculous to the faith-sustained Anarchist. Does not many a British soldier firmly believe that the Queen rules England and personally directs the disposition of the army? That such persons as the Empress of Austria are among those chiefly responsible for the evils of the world, is as plain to the misguided Anarchist as it is to certain other would-be reformers that the millionaire extracts his millions from the tramp, the pauper, and the unemployed, or to still others, that the public revenue derived from liquor is largely contributed by the widow, the orphan, and the bar-room loafer. It is not in the character of the data on which they rely, nor in the logical processes by which they arrive at their conclusions, that the Anarchists differ from other misguided philanthropists. They are unique only in the methods which they adopt for righting the wrongs of the world. These methods are so drastic and their victims so prominent that society feels outraged and their degree: hence, after each prominent assassination, serious discussion arises as to how the world is to protect itself from this variety of fanatical reformer.

Inasmuch as such crimes are not committed with criminal intent, or with any sordid personal end in view, but usually from a hideously mistaken sense of duty, it is impossible to stamp out the ideas which give rise to them, by any of the methods commonly resorted to for the repression of crime. By international measures of a very stringent nature, Anarchy might be driven below the surface, but such action would simply add to the righteousness of its principles in the eyes of the faithful. The world is full of spoiled lives for whom death has little terror, but for whom a fancied revenge joined to the distinction of martyrdom might have strong attractions. To such, drastic repression means only encouragement. Tempted as the nations may be to attempt the vigorous stamping out of Anarchy, to give way to the temptation would be a mistake. Nothing will have so withering an effect upon this unwholesome fungus as light and ventilation. While criminal acts must be promptly punished, yet theories which advocate them as cures for social evils can be met only by free discussion, which will soonest prove their absurdity and wickedness. Many a proposition most stimulating and awe inspiring when whispered in perilous secret proclaims its own absurdity when spoken in public.

It is premature to attempt to forecast the outcome of the Quebec Conference, especially since the Premier has characterized as The Quebec Conference. unmitigated bosh the guesses of the newspapers as to what has been going on within the veil of that important assembly. Most of the papers, anxious enough for saleable news, would prefer to have the Conference carried on in public under the stimulus of counter shouts of encouragement and disapprobation, of solemn warnings and gratuitous advice from a closely packed press gallery, not to mention a medley of discordant cries from all manner of conflicting private interests from the Atlantic to the Pacific, and even considerably seaward off both coasts. Wisely, however, they have sought such shelter as is available these days, and the chances for making progress are much increased.

Of all the subjects to be dealt with, that of trade relations, though not perhaps the most irritating, is by far the most important to Canadians. All other matters have mainly a local or sec-

tional interest, but whether Canada shall or shall not have freer trade connection with the rest of the continent, is a vital question for the future of the country. In its political or social relations Canada sacrifices nothing in having a distinct national existence. There is free intercourse for persons and free exchange of ideas. But in the matter of trade Canada is a narrow transcontinental strip of industry and commerce, separated from the great body of industry and commerce to the south by hostile tariffs, and broken up in its domestic intercourse by costly transportation over hitherto barren areas. Moreover, it is divided in its oldest and most populous section by the interposition of a distinct nationality having little intercourse, commercial, social, or intellectual, with the English elements to the east and west of it. Thus this country labors under economic disadvantages as compared with the nation to the south, which have hitherto prevented its corresponding development, and which have presented a steady inducement to great numbers of the more active and enterprising youth of Canada to seek their fortunes in the United States. The success of many of these Canadian emigrants may be flattering to the land which produced them, but it is a strong inducement to others to follow their example. Each political party attempts to lay the responsibility for the exodus at the door of the other, but, for the most part, quite unreasonably; the causes of the exodus are not political but economic. The emigration of so much of the best blood of Canada to the United States will never cease until there is equality of opportunity and outlet as between the two countries. This can exist only under two conditions: either when Canada has within itself as large and thrifty a population and as varied interests as the United States; or when no one requires to leave Canada in order to enjoy as complete a command of the continental advantages as are to be had in the United States. Owing to the physical character of our country the first condition can never be fulfilled, a certainty which no patriotism however unreasonable can overcome. The second condition is within the range of the possible, but whether it will ever be actual will depend on what may be accomplished by such conferences as the one now assembled at Quebec. To give the Canadian in Canada an equal opportunity with the Canadian in the United States, there is required free access to the American mar-

kets. True, the objection to this on the part of Americans commonly is. You cannot expect us to open to you a market of sixty millions in return for one of five millions. So far as the matter is looked at from the point of view of the seller, this objection is very strong. But looked at from the point of view of the buyer, the advantage is reversed. The difficulty of getting the interest of the buyer recognized is due to the fact that as a seller the interest of each is concentrated on one article, whereas as a buyer it is diffused over many articles. With protectionist ideas still strong on both sides of the boundary we cannot hope for many concessions to free intercourse. Each will desire free exchange in the lines in which it is strong which will be the very lines in which the other will desire to maintain barriers. It cannot be denied that improved intercourse is of more moment to Canada than the United States, and there is certainly a keen interest throughout the Dominion as to the result of the Conference in relation to trade.

S.

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