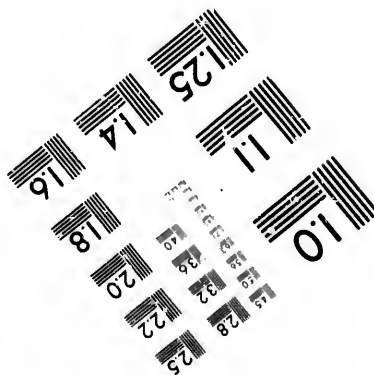
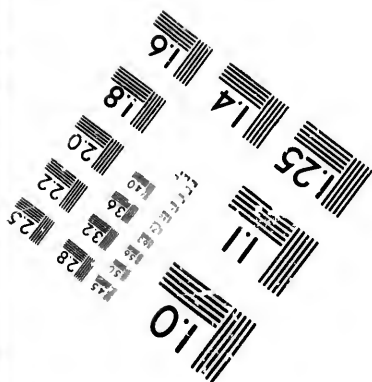
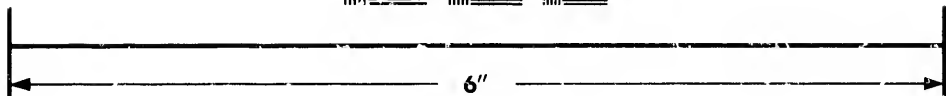
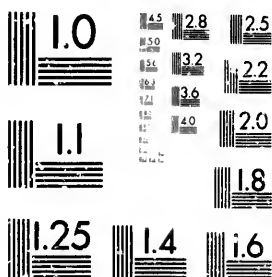


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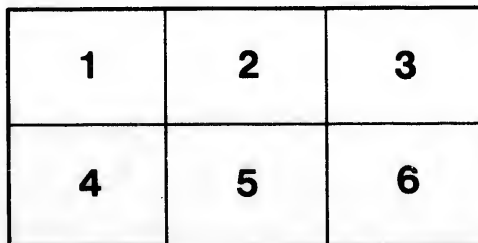
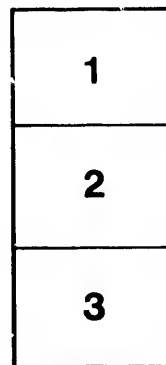
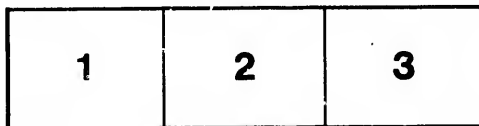
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# MECHANICS' INSTITUTES,

AND THE

BEST MEANS OF IMPROVING THEM.

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## PRIZE ESSAYS.

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Toronto:

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# MECHANICS' INSTITUTES AND THE BEST MEANS OF IMPROVING THEM.\*

## I.

BY THOMAS DAVISON, TORONTO.

MOTTO.—“*To make the Mechanic a better Man ; the Man, a better Mechanic.*”

*To the President and Executive Committee of the Mechanics' Institute Association of Ontario.*

I PRESUME that the Executive Committee of your Association, in offering prizes for the best Essays on “Mechanics' Institutes, and How to make them more Attractive to Mechanics,” had in view the interests of all working-men, whether engaged in mechanical pursuits or not; therefore, the few suggestions I make will be directed towards the general good, without distinction of class.

In order to bring the matter clearly before us, we will imagine a town or village without a Mechanics' Institute or other Literary Association, and proceed to discuss the best method of establishing one, floating it off on the tide of public favour; and, secondly, the objects it should aim to achieve.

Whilst the interests and peculiar wants of working-men should be jealously guarded in forming a constitution and by-laws, care should be taken not to alienate the mercantile or professional classes, from whom all Institutes in this country receive the greatest support. Without going into details for the present, it will, I think, be found best to have the Board of Direction composed of twelve (12) members, namely, President, Vice-President, Treasurer, and nine (9) ordinary Directors. In places where a perma-

nent paid Secretary and Librarian is too great a tax on the resources of the Institute, and the office is honorary, that officer should have a seat at the Board. The composition of the Board should be six employers and six employees, regardless of occupation. In cities where there are an unlimited number engaged in mechanical pursuits to draw upon, half the Board is sometimes restricted to that class. In country towns, however, no small share of the members are to be found amongst the agricultural class, and for that reason they should have the fullest opportunity of being represented. Having formed the Board, obtained a sufficient number of subscribers to ensure success, and having secured a suitable building, we now proceed to furnish the Institute with a

### LIBRARY.

It is an unfortunate fact that the public taste inclines to “fiction”—a taste that must be met by a judicious selection, the greatest care being taken to exclude anything approaching to what is known as the “yellow cover” style. The works of men like Dickens, Scott, Thackeray, Lytton, and many others, are now admitted by the most eminent clergymen to have a tendency to do good. History is perhaps the next section of the library that will demand attention. Next, books of travels and voyages. Scientific works should form an important feature in every library. It is to be regretted that whilst, as a rule, they are costly, they are but seldom read. There are, however, cheap editions of the most popular works to be had, sufficient to train and stimulate the artizan to further researches. Donations to this section may be readily had, if the Directors will make their wants known. All books of great

\* [The Association of Mechanics' Institutes of Ontario some time ago offered two prizes, of \$40 and \$20 respectively, for the best and second-best Essays on “Mechanics' Institutes and the best means of Improving them.” Fifteen compositions were sent in, and the majority of the judges awarded the first prize to this Essay, by Mr. Thomas Davison, and the second prize to the following one, by Mr. Richard Lewis.]



value, whether by reason of their cost or their rarity, should be classed as works of reference, and only allowed to leave the library under certain restrictions. When your library is completed and opened to the public, it should contain the following sections—1. History and Biography. 2. Science and Art. 3. Voyages and Travels. 4. Fiction. 5. Poetry. And 6. Miscellaneous. In numbering the books, sometimes each class is designated by number and letter, as A 21, History; B 110, Science, &c. The letter and number together sometimes leads to confusion in the entries. If you make History run from No. 1 to 200, Science 200 to 400, and so on in proportion, you will save any possibility of error through duplication, and, at the same time, will more readily enable you to know what class a book belongs to without reference to the catalogue. The duty of recording the issues, whilst of the simplest character, is often neglected. The Directors, as custodians of the members' property, should see that it is properly attended to. An excellent plan was published by your Association some time ago, well adapted to all towns and villages. Another plan is to enter the book to the member the same as one would enter a sale of merchandize in a day-book, then posting it into the member's account in the ledger. The methods are almost as different and as numerous as the libraries. Having fully sketched the necessities and requirements of the library, we will next proceed to furnish the

#### READING-ROOM.

The first and most desirable newspapers are local, next Canadian, next English, then the United States journals. As you will not be able to furnish each reader with a paper, it will be found well to have the most prominent papers placed on a shelf running round the room, filed, and raised so high that a person can comfortably stand to read. By this means two can often peruse at the same time, and besides, having to stand, the tendency so often displayed by some avaricious members to monopolize the paper for hours is checked. Papers not in much demand, and such magazines as you may take, can be placed on the table, to which there ought to be comfortable chairs. The whole room should be made as cheerful and comfortable as a private parlour.

Don't be afraid of paint and whitewash. Coal oil and gas are cheap: have the place well lighted, and, above all, have it properly heated and ventilated. Make the place so nice that its comforts will excel those of the saloons and taverns. Members ought to be invited to place such papers as they personally receive, after using them at home, on the table; and as nearly every one takes a Magazine or Journal of some sort, you can by this means make the cost of your reading room comparatively small.

The "Reading-Room" and "Library" at present constitute the sum of the attractions in most Institutes, but I think another should be added—namely, a

#### CONVERSATION-ROOM.

While the reading-room and library possess attractions for the student, there are a large class to whom any lengthened study after a hard day's manual labour is anything but enticing. This class resort often to saloons and taverns almost from sheer necessity, as an asylum from the cold charities of a boarding-house. What was done originally to while away an hour becomes a fixed habit, with its usual attendant—intemperance. Whatever can be done to provide rational amusement, even if not combined with instruction, is a benefit to the working-classes; and it is here where Mechanics' Institutes have an hitherto unbroken field on which to sow good seed. By all means, then, provide a "Conversation Room" separate from the "Reading Room." Leave it to the vote of the members whether smoking shall or shall not be allowed; if it is, I think it will be all the better. Introduce harmless but interesting games, such as Chess, Drafts, Dominoes, &c., and if your funds will permit, a bagatelle table, or even a billiard table. In this room the members will become acquainted with each other, and besides the ordinary chit-chat of the day, discussions of an ordinary character will often arise, in which, started by two or three, the whole company will be drawn in. If your room is large enough, have a horizontal bar, swing, or other gymnastic apparatus for the enervated Dry-goods or Bank Clerk to strengthen his muscle. Have the room as large as your means will afford; it need not necessarily be expensively ornamented.

Presuming you have your library, reading and conversation rooms fitted up, try and

interest your lady friends to furnish you a few pictures and flowers for their ornamentation.

If your means will permit, devote another room as the nucleus of a museum and model room. Most of your members can contribute something—old coins, manuscripts, models of art and machinery, &c. In a little while you will find you have actually a museum worthy of the name.

#### MANAGEMENT.

In the executive management it is imperative that you should have men whose heart is in the work. I would rather see a plodding, earnest, hard-working President than a brilliant man of position who neglected his duties, and thought he honoured the position instead of the position honouring him. Let all your Board be earnest, and not feel that because the responsibility of the management is divided amongst a number, they are not called upon for individual effort.

It will be found an advantage to form the following Committees:—1st, Finance; 2nd, Library; 3rd, Classes; 4th, Lectures and Entertainments. As to their duties, it will be for the FINANCE COMMITTEE to look closely after the receipts and expenditures; to fix the rate of subscription, so as to make the Institute self-supporting, when aided by the Government Grant. The moment you get behind in your payments you will begin to flag. Books cannot be bought as readily on credit as for cash. In fact, it will be like any mercantile business—credits will have to be paid for. The Finance Committee should also see to the proper repairs of the building, and letting of rooms, if there are any. For these reasons it is well to have one member conversant with financial matters, and one mechanic acquainted with building.

#### LIBRARY COMMITTEE.

The duty of this Committee will be to select the books, to see that they are properly used, not abused, and to generally supervise the library. It is hardly necessary to say that in a thoroughly non-sectarian Association the greatest care must be taken to exclude anything of a character likely to offend the prejudices or belief of any member. I do not say, however, that the Board should deny shelf-room to religious works

of a controversial character, when presented to the Institute.

#### CLASS COMMITTEE.

The work of this Committee will depend largely on the population of the town or village in which the Institute is located. I can hardly imagine, however, a place so sparsely populated but that one or more classes could be successfully formed. In our country there are a large number who in the land they left, either from poverty, improvidence, or neglect, have grown up in a state of ignorance, but who, coming to Canada, and succeeding in their occupations, feel sadly the need of more learning. I think that it should be the duty of the Government and Municipalities to provide for adult education; but until that is done—if ever it is—Mechanics' Institutes must supply the want. The classes most desirable are—1st, Writing; 2nd, Spelling; 3rd, Grammar and Arithmetic; 4th, Architectural, Mechanical, and Ornamental Drawing; and the study of telegraphy and phonography, in this progressive age, are also well worthy of attention.

Should the number of pupils warrant it, these subjects might be taken up separately. Two lessons a week, of one and a half hour's duration, will be found quite as much as the majority of pupils can do justice to. In distributing rewards for proficiency, punctuality should not be overlooked. It is no slight sacrifice for a youth to give up all amusements and devote himself to culturing his mind, whilst his companions are disporting themselves.

#### LECTURES AND ENTERTAINMENTS.

In these days, when sensational entertainments are all the rage, a Lecture Committee has up-hill work. Still there is no reason why they should not succeed in providing the public with instructive entertainment, even if the financial result is not always what may be desired. In every town you have a doctor, a clergyman, a lawyer, and an editor. Secure the services of these four gentlemen, and you have "a course," even if you fail in getting others. Unless, however, your town is very small, there is no reason why you should be restricted to those gentlemen I have named for the sake of illustration. To secure the support of all classes and creeds I would recommend the

formation of an Auxiliary Committee, some of whom should be ladies. Let your lectures be preceded and followed by some cheerful vocal or instrumental music and select readings. This will make your entertainment pleasing to all, and the number participating in the performance will tend to popularize it and bring in the money which no Lecture Committee pretends to despise. I would strongly urge the appointment of some ladies on this Committee. Where the conversation room is sufficiently large, it might be used for these lectures, thereby saving the rent of a hall, which may be away from the Institute.

In conclusion, permit me to make a few GENERAL REMARKS. The non-success of most Literary Associations is—first, bad

management; second, want of means. If directors and members will work together with a will, there is no reason why either should prevail. Institutes are for the public good, irrespective of creed, class, or colour, and only require a proper representation of their claims to meet with the hearty support of every right-thinking citizen. It is often the only Institution in the town that attempts to counteract the baneful effects of the drinking saloons. From every pulpit (it would not be too much to say) its claims should be urged. Let, then, any community who may have, or intend to have, an Institute, see that it does not halt, but go steadily forward, progressing with the population, and fulfilling the duties of a public educator and public benefactor.

## MECHANICS' INSTITUTES, AND THE BEST MEANS OF IMPROVING THEM.

### II.

BY RICHARD LEWIS, TORONTO.

MOTTO.—“*To make the Man a better Mechanic, and the Mechanic a better Man.*”

MECHANICS' INSTITUTES form an important element in the development of popular education. They are associated with the history and progress of National and of Sabbath Schools, and their claims upon public benevolence and philanthropy arose almost simultaneously with those great institutions which, in their splendid results, are now regarded as the great necessities of civil society and the Church. When National Schools for the education of the youth of the country were claiming the sympathies of the philanthropist and the statesman, the friends of the adult population urged the pressing necessity of supplying them with the means of instruction. While the common schools, open to the poorest, were established to arrest future ignorance and all its evils, it was urged that multitudes who had never received the advantages

of early culture were hungering and thirsting for knowledge—suffering all the consequences of neglected education—ripe for vice or crime or any form of lawlessness, because they were destitute of common knowledge, and because man is never satisfied to exist in a state of ignorance and mental darkness—ripe for intellectual improvement and for advancement to a higher state of social life. Deeply impressed with these views, able and benevolent men, at the head of whom stood the great Lord Brougham and Dr. Birkbeck, urged the necessity for establishing night institutions for the education of the working-classes in the useful branches of elementary knowledge, and for their instruction in science by means of popular lectures, and their entertainment by means of public reading rooms. The idea was novel, striking, and reasonable,

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and at once commended itself to the good sense and generosity of the wealthier classes. Mechanics' Institutes sprung up in every part of the country, and were liberally supported by all ranks: the rich contributed their wealth, and gave their influence and their co-operation to manage the affairs of the Institutes; and the classes for whom they were especially designed did not show themselves ungrateful or unworthy of the interest and the generous efforts made in their behalf. For many years the classes were crowded with faithful and zealous students, and the lecture rooms were the favourite resort of all classes, and formed a bond of social reunion between ranks of society too widely separated by the accidents of fortune and position. If the history of Mechanics' Institutes were written, it would present very satisfactory evidence that the benevolent designs of their founders were most successfully accomplished. In very many instances, and especially in the towns and cities of manufacturing districts, not only were the Institutes flourishing, but the instruction was sound and useful, and the lectures were frequently of a very high character. The ablest literary talent of the country was engaged,\* and the subjects were of a thoroughly practical and elevating character. The spasmodic system of single lectures, now so prevalent on this continent, did not then prevail; but courses of six, eight, or twelve lectures were given on a scientific topic, embracing all its leading points, with ample illustrations and apparatus when necessary. These lectures were generally distinguished for their simplicity, fulness and appropriateness, and could not fail to be the means of diffusing a great amount of useful knowledge throughout the country, and amongst all classes of the community, but chiefly that class for whom they were especially intended. But apart from this issue, a still higher result followed in the cultivation of scientific and artistic and literary tastes. No one could listen to the popular analysis of the steam engine by Dr. Lardner; or the delightful discourses of the unfortunate

Haydon on painting, and art, and the Elgin marbles; or the interesting histories of animal nature by Professor Owen; or the fascinating histories of music and the old madrigals, with the charming illustrations of voice and instrument, by Professor Taylor, of Gresham College, and a host of other splendid lectures by equally able lecturers, all open to the members of the Institutes, without being edified, instructed, and refined. These were moral and intellectual advantages associated with this feature of the Mechanics' Institutes of thirty years ago of which we can have but a dim conception now. The enthusiasm with which they were then supported secured for their success the services of the highest cultivated minds in literature, art, and science; and while that order of talent was engaged in the work of popular adult education, the classes and the lecture halls were crowded, and the libraries were filled with books in harmony with the pursuits and the tastes stimulated and sustained by the lectures.

A great change has marked the history of Mechanics' Institutes during the last twenty years. The lecture platform has ceased to be occupied by the best literary and scientific talent of the countries in which these Institutes exist, and in too many instances the lectures have been made to pander to low tastes and emotions, with no reference to the elevation of the masses or the instruction of the members. It has been asserted that the working-men found the subjects too dry, and deserted the lecture hall because they had no desire for scientific or literary culture of a solid and high character; and it has been said that the conviction is gaining ground that adult education is a hopeless task. With reference to the failure of the popular lectures, it is quite possible that the indifference lay as much on the side of the lecturers and the wealthier classes whose munificence, while it lasted, kept the Institutes in successful action. Many of the lecturers gave their services gratuitously, while the enthusiasm associated with a new and popular movement prevailed; and under the pressure of that enthusiasm gave their best efforts to make the lectures interesting, clear, and instructive; and when the lecturers were paid for their services, the temporary liberality of the wealthy patrons of the Institutes removed all financial difficulties. Even at the present day,

\* The writer has had the privilege, as a member of the Liverpool Mechanics' Institute, of hearing courses of lectures by Dr. Lardner, Professor Owen, Haydon the painter, George Thompson, Sheridan Knowles, Dr. Epps, Professor Wallis, Hemming, John Wilson the Scotch vocalist, and many others of equal eminence.

when the lecture is sensational and the lecturer popular, the cost often exceeds the receipts; and when the lectures were of a higher order and spread over a term, it is more than probable that they failed because the moneyed supporters failed in their donations, and the qualified lecturers failed in their zeal when their lectures were gratuitous.

There are, however, no grounds for believing that adult education is a hopeless task. On this continent and in this Province there are abundant evidences of adults learning mechanical and agricultural pursuits, and entering upon a course of long and arduous study with eminent success; and in England and France, where the education has been adapted to their special necessities—the direct technical culture of workmen—they are at this hour crowding the class-rooms and pursuing their studies with all the ardour of professional students.

#### THE WORK OF MECHANICS' INSTITUTES.

The work of the Mechanics' Institute is the education of adults—of all who have passed out of the common school into the workshop, or the business of life, whatever it may be, and whose education is defective in the pursuits they are following. In its lowest aspect it is designed to supply the deficiencies of early education; but in its highest and widest application it may legitimately aspire to the highest technical culture of the industrial classes in their special occupations, and their general culture in all that enlarges and refines the mind, and fits them to be useful members of society, and to enjoy all the intellectual resources of which their nature is capable. The importance of this special education has been recognised by most of the civilized Governments of the world. The general education of the youth of a country is admitted to be a State necessity—an imperative obligation for securing rational obedience to the laws, respect for all just authority, the safety of public liberty, and the advancement of civilization. But the technical education of the industrial classes—the education of the agriculturalist in science, and of the mechanic in art—has special objects and methods which cannot be introduced into any system of common-school education. Whatever it may exclude, it must embrace all those studies which have relation with the manu-

factures and productive arts of a country. Statesmen and politicians may suggest forms of legislation for the encouragement of native industry; but in the markets of the world, the produce of manufacturing and agricultural labour must always finally rest their claims to preference on their superiority and intrinsic value. Even manufactures native to the soil, if dependent for their development on the patronage and protection of the Government, will never advance beyond a certain point of excellence, and will inevitably depreciate in value, unless by the skill of the producer they are able, by their superior finish and appropriateness, to compete with the products of the outside world.

The great Exhibitions of Arts and Manufactures which, since 1851, have been held in the chief cities of the world, have been the means of showing the importance of this technical education, especially in industrial drawing, to the artizan class; and as these Exhibitions have given indubitable evidence that nothing but the superior education of the producer, in his special pursuits, can advance art manufactures, the leading countries of the world are making great and liberal efforts to educate the operative manufacturer in the specialties of his work.

Professor Ware, of the Massachusetts Institute of Technology, says: "At the Universal Exhibition of 1851, England found herself, by general consent, almost at the bottom of the list among all the countries of the world in respect to her art manufactures. Only the United States among the great nations stood below her. The first result of this discovery was the establishment of Schools of Art in every large town. At the Paris Exhibition of 1867—that is, after the experience of only sixteen years—England stood among the foremost, and in some branches of manufacture distanced the most artistic nations. It was the Schools of Art and the great collection of works of industrial art at the South Kensington Museum that accomplished this result. The United States still held her place at the bottom of the column."

"The report of the French Imperial Commissioner upon technical instruction, says: 'In some countries, as in Wurtemberg and Bavaria, (Nuremberg,) drawing is the special object of the schools; and the impulse it has given to all the industries requiring that art is sufficiently striking, and so generally recognised as to render evident the usefulness and necessity of this branch of instruction. A glance at the

immense variety of children's toys with which Nuremberg supplies the whole world, will suffice to show the progress due to this diffusion of the art of drawing. The very smallest figures, whether men or animals, are all produced with almost artistic forms; and yet all these articles are made in the cottages of the mountainous districts of the country. They find employment for the whole population, from children of tender age, as soon as they can handle a knife, to their parents; and this home manufacture, which does not interfere with field work, contributes greatly to the prosperity of a country naturally poor and sterile.' It has recently been said, by one who ought to know whereof he asserts, that some of the great failures which have recently occurred among manufacturers are largely or wholly due to the fact that the companies have been obliged, of late, to sell their goods below cost because of inferiority in design. Other compar'es manufacturing the same kind of goods, but of superior design, find no difficulty in disposing of all the goods they can produce, and at a large profit.

"A writer in a recent educational journal, in answer to the question why there is such an interest in art education, says: 'It is because the great Industrial Exhibitions of the world, from the first one at London in 1851, to the last at Vienna, show, beyond a scintilla of doubt, that such an education is a leading factor of national prosperity. Because a large class of American manufacturers have discovered that under the levelling influence of steam transportation and telegraphy, they must be completely driven from even the home market, unless they can carry to that market in the future more beautiful products than hitherto. Indeed, nothing is so saleable as beauty. Because American artisans are learning the more artistic the work they can do, the better the wages they can command; that, in truth, there is hardly any limit to such increase. Because they further find, in all varieties of building construction, that a knowledge only sufficient to enable them to interpret the working-drawing placed in their hands (and nearly everything is now made from a drawing), will add one-third to their daily wages.'"

#### IMPROVEMENT OF EXISTING ORGANIZATIONS.

In the meantime, however, we are bound to carry out as we best may the twofold objects of the Mechanics' Institutes as they exist and are organized. We have no central Model School of Art like that of South Kensington, and we have an industrial population whose intellectual necessities and appetites must be satisfied and gratified. The Institutes of the Province have at present a most irregular and anomalous aspect and

organization. In many instances great and sometimes successful efforts have been made to raise them to their legitimate uses. Classes for the instruction of adults have been formed, made to introduce science and art studies. In many Institutes classes for elementary instruction to meet the deficiency of early education have been successfully formed, and occasionally lectures of a scientific character have been delivered. The efforts of the Association formed for the affiliation of Mechanics' Institutes are awakening a deeper interest in the work of such Institutes, and a truer conception of their ultimate design, and that Association, if judiciously directed, will, no doubt, offer the bases of all our future labours in developing and advancing industrial education. But in most instances the Institutes of the Province as they stand are simply night schools to supply the deficiencies of early education in the commonest rudiments of knowledge, or in such subjects as students require who are anxious to escape the drudgery and social degradation which they associate with mechanical or agricultural labour, for the more ostentatious and respected, if not respectable, positions opened to them in commercial life; or they are simply resorts for intellectual pastime and entertainment.

#### IMPORTANCE OF ELEMENTARY EDUCATION TO THE INDUSTRIAL CLASSES.

It would be a most unwise and unjust policy, in our efforts for the improvement of these Institutes, to divest them of their popular character. While the ultimate purpose of the Institute is to be kept in view—the technological education of the industrial classes—a very large proportion of that class will rise amongst us wanting in the commonest elementary education; and policy as well as philanthropy demands that we should secure for those classes the best elementary education in our power. Every argument that can be advanced in support of a national system of education for the youth of the country, holds with equal force in behalf of the education of the working masses. They form the dangerous classes of every community while they are ignorant, and in the aspect of their mental helplessness they appeal to the sympathies and benevolence of all educated men and women. With them the great peril is a moral

one, that while they are shut out from participating in the enjoyments and pursuits which knowledge offers to its possessors, they naturally desire mental action and excitement, and find their gratification in low pursuits and dangerous vices. The purpose of our system of education is to supply the necessary education, but it will be a long period before the system we have inaugurated shall meet all the defects of past neglect; and however successful and widespread that system may be, as a country whose population must grow out of immigration, we shall still be subject to the deluge of European ignorance. In this view, elementary instruction for adults becomes an object of national importance, and Mechanics' Institutes, whether in that or higher education, have as strong a claim upon the support of the country as Universities, High or Public Schools.

#### NATURE OF THE STUDIES IN THE PREPARATORY DEPARTMENT.

The really essential subjects of instruction in classes for adults are few. These subjects are—(1) READING and SPELLING; (2) ARITHMETIC; (3) PENMANSHIP. In the arrangement of these studies, a system of grading like that adopted in the best class of Public Schools should be established. Throughout the land, in city and rural districts, there will exist a large class scarcely able to read or write, or make the simplest calculations. Amongst this class there will be found many obstacles to study—a false shame, or an utter indifference, or a disposition to magnify the difficulties or undervalue the importance of the studies under consideration. We make great efforts to secure scholars for the ragged and the Sabbath schools; and the necessity for pressing adult ignorance, especially when it is full of the life and energy and restlessness of youth, into our evening classes is equally great. The most ignorant—those who cannot read at all, or write their own names—ought to find the evening classes ready to help their necessities, and to give the help in the best and kindest spirit. While every inducement should be offered to lead the ignorant to enter on to the path of improvement, every objection or obstacle likely to discourage the beginner ought to be removed. In all cases the teacher, whether a paid or a voluntary agent in the good work, ought to exercise

patience and gentleness and firmness. It is always unwise to allow boys and girls to associate in the classes with adults. In the adult, there is the consciousness of ignorance and sensitiveness to ridicule or impertinence, and in the young a disposition to exercise these powers. One means of inducing the most ignorant class to pursue these studies would be that of reading to them selections full of interest and beauty, but simple and equal to their comprehension, to show them what delights the faculty of reading would open up to them, and how much they were losing by its want. Thus, too, in the study of arithmetic, while head and hand practice should predominate, and theory be disregarded, yet purely mental exercises suited to the understanding, but not in any respect childish, ought to be mingled with the regular practice. It would add also to the charms and attractions of study if the teacher would sometimes throw aside all books, and give in the most familiar style a popular lesson in popular geography or astronomy, and by a mere statement of interesting facts connected with the one, or marvellous wonders discovered in the other, excite attention and inquiry; while the practice might be varied by an occasional lecture on "Common Things," and the philosophy of "Common Life." While these arrangements have reference to the grading and instruction of the lowest class of students, the curriculum must embrace that class which has not been altogether neglected, which possesses some knowledge of elementary subjects, aspires to higher attainments, and by previous culture is prepared to pursue them. A second grading in reading would have reference to delivery, expression, the power of uttering literary composition with the distinct articulations and scientific inflections of the elocutionist; and arithmetic would be expanded into a science, embracing a knowledge of Fractions and Ratio, and their application to science an commerce, popular mathematics—*i. e.* elementary algebra and geometry and mensuration. Again, instruction in plain book-keeping is necessary, especially when females attend the classes—and their attendance ought to be contemplated in all evening classes. But here the instruction should be simple, and aim at nothing higher than facility in keeping the details of common life, and in the case of females, of household expenditure. The elaborate systems of book-keeping em-

braced by the commercial colleges are not necessary to the education of mechanics. They are intended to make the professional book-keepers; and as the object of the students who desire the higher course is to escape from mechanical toil, Mechanics' Institutes are not justified in devoting their time or spending their funds to aid such aspirations. The elementary and necessary book-keeping suggested may easily accompany the arithmetic studies, and by complementing them and penmanship, be of service to both studies. Equal, however, in importance with reading and spelling, and closely associated with them, must be classed the studies of grammar and composition. A popular study of grammar, which secures to the pupil as much knowledge of the subject as will enable him to parse and analyze common sentences with facility, and understand and practise in composition the essential rules of syntax, would not only offer exercises highly valuable for their intellectual discipline, for the knowledge of language and the relations and logic of thought cultivated by them—most important for the development of mental power, but absolutely necessary for understanding and enjoying the higher order of literature, with all its elevating and refining influences. Further than this, it must always be considered that as mechanical education means something beyond a mere knowledge of the material principles of art and science—should, in fact, aim at and embrace refinement of taste and development of imagination, the influence of all high-class literature—it is really necessary to the mental culture of the artisan, if we are to aspire to that excellence in mechanical industry which will add beauty and gracefulness to usefulness and completeness of work. The practice of composition should always commence with and accompany the study of grammar. The mere study of the parts of speech exhibited in parsing and analyzing a sentence, offers an exercise as valuable in its logical and intellectual bearings as the study of arithmetic, to students who will never enter into the study of true logic or classics. But the *uses* of language in the expression and the cultivation of correct habits of thought can only be secured by practical composition. The practice need, however, never be very comprehensive, and should rarely go beyond

what is necessary for the daily life of the mechanic. When once that power is acquired, native talent will prompt to higher efforts, and if the student have special gifts and tendencies in the direction of literature, the elementary start he has secured will be enough to help him to higher triumphs. Elaborate themes on subjects far beyond the knowledge and experience of beginners should have no place in primary education; while the exercise of composition on familiar topics may be introduced in the commencement of the grammatical studies, and should never be separated from them nor neglected.

#### TEACHERS, PROFESSIONAL AND AMATEUR.

The organization for this elementary instruction cannot be effective without the aid and the superintendence of the professional teacher. His skill in directing the studies, in classification and methods of teaching, is indispensable to the success of the night classes. When the pupils are numerous, however, and the attainments varied, requiring separate classification, and the funds of the Institute not ample, the *voluntary aid* of benevolent and qualified instructors might be secured. Every educated person could not give money to secure professional assistance, but every educated person could assist in the elements of instruction required for adult education. There is some analogy between the claims of the night classes of the Mechanics' Institute and those of the Sabbath School. Both are established to supply knowledge, to remove ignorance, to advance virtue and truth, and especially to provide instruction to those whose circumstances would, without such help, leave them destitute of any culture. The duties of the Sabbath School have higher objects in view, it is true; but in a mere temporal point of view the education of the working classes in the Mechanics' Institute is quite as important in its moral aspect as that of the pupils of the Sabbath School, and presses with equal force on the benevolence of qualified voluntary teachers. In the absence of paid professional teachers, arrangements might be made of the following kind wherever voluntary aid could be secured: One night in the week might be given to each of the important subjects, Reading, Writing, and Arithmetic, and, if possible Free-hand Drawing. Four teachers



could undertake the instruction of the classes, and thus each teacher would only be required to devote one night a week to the duty. If a superintendent, as in the Sabbath School, were appointed, the machinery for carrying on the evening classes would be as complete for action as that of the Sabbath School. If such an arrangement were made, it would be of the first importance to act on a well-prescribed system—to have a programme of duties prepared for a session—to have monthly examinations, not for exhibition, but for testing progress. If a professional teacher could not be secured to act as superintendent, and to lay out the best plan for operations, the next best course for the managers would be to consult the School Inspector of the district, and secure his advice and assistance in drawing up the plan for forming and conducting the classes. It has been one great cause of failure in the conducting of these evening classes hitherto, that there has been no well-organized and uniform method, as we have now in our public schools, where uniformity of action could combine with uniformity of purpose, and thus lead to the best results of harmonious instruction. In the method suggested, only four nights in the week are allotted for instruction in classes. The fifth night would thus be left for miscellaneous subjects. Amongst these miscellaneous subjects might be included lessons in history, geography, and subjects of a similar kind, which are best taught in the form of familiar lectures. Completeness and depth would not be necessary in this instruction. To awaken interest in these subjects, to suggest modes of study and books to be read for wider knowledge, would be the chief object, and the clergyman, the lawyer, the doctor, or the school-teacher could all in turn be enlisted to serve in so good and useful a work.

Before concluding this subject of elementary classes, it may be useful to ascertain what is done now in this regard in our own Province. According to the Report on Mechanics' Institutes for 1874, it appears that out of thirty-seven Institutes in affiliation with the Association, sixteen had evening classes and twenty-one had none. The cost of these sixteen classes amounted to \$2,709, and the receipts probably about \$1,500; so that the net expense of instruction would not exceed \$1,200. The expenditure is inevitable,

and the more efficient we desire to make the classes, the higher ought that expenditure be. It is judicious to make a small charge for the education to adults. But when the duty is so imperative; when the cost of ignorance is so immeasurably greater than of education; public policy as well as philanthropy not only justifies this cost, but a far heavier one, to be supplied out of the public treasury, if we would make the Mechanics' Institute what in reality it should be—a College for the Industrial Classes. The teaching power and the machinery for instruction are totally inadequate to the great end in view. While for merely moral and social ends the education of adults presses with as strong claims upon the liberality of the country as that of youth, art ought to have as adequate aid; its importance to commerce and manufactures and agriculture—the certainty that an educated industrial class would enrich the country by its superiority of workmanship and the higher moral principle governing it—this would justify and repay the costliest expenditure on adult education. We need capacious class-rooms; we need apparatus and educational diagrams; but above all we need the very soul of effective instruction, skillful and educated teachers. The Institutes are now doing the best they can under the circumstances; but they cannot, with their present meagre means, their chief dependence on private benevolence and the small subscriptions of their members, ever accomplish the great work apportioned to them. To raise them to the height of their important duties they must receive the grants of the nation in the same spirit of liberality and justice as it now supports its other educational institutions; and the Government, exacting the condition that the classes it supported should be placed under professional inspection, would secure a methodical and progressive and competent system of instruction.

#### THE READING-ROOM, LIBRARY, AND ENTERTAINMENTS.

It is by a combination of attractions and duties that the Mechanics' Institutes can be best made to succeed. The earnest student, conscious of his intellectual defects and deeply anxious to remove them by zealous and patient study, will offer no difficulty. He comes as the humble disciple to the feet of his Gamaliel for instruction, and needs

neither prize nor spur to attain his purpose. But there is another class, in moral aspect the more important class, that we must allure from low and sensual pursuits to the studies of the night classes. It is the ignorant and indifferent—the class that in cities and villages and rural districts give the greatest trouble, because, destitute of all intellectual tastes, weak in moral principle, yet strong in animal energies and passions, they must have occupation, and when freed from the labours of their daily life, they find their excitement and a relief to their passions in lawless disorder, intemperance, and even violence. If they are able to read, the reading-room and library must exist and be made attractive. Then the literature must be varied as the tastes of the classes to be considered and the funds will allow. We are now regarding the mental necessities of the class destitute of reading tastes and habits. It is vain to press the solid literature of science or philosophy or history upon them. We must excite and gratify their imagination as the most accessible faculty of their natures. Healthy and innocent, but attractive fiction and poetry must be amply provided; for it is better they should read fiction, or what is termed light literature, than read nothing. Indeed it is so important, and yet so difficult, to establish the habit of reading anything in minds never accustomed to any study, that special lectures, explanatory of the leading works of fiction, illustrated by reading extracts in the best dramatic style of impersonating and realizing the character and creation of fiction, would greatly aid the object in view. Of course, if such illustration could be given with the best elocutionary effect, the influence would be stronger; but the fictions of genius have always a charm and a beauty in them which commend themselves, even without elocutionary efforts, to all natures. They appeal to the hearts of men; they exercise and delight the imagination in so healthy and natural a manner, that the most ignorant are captivated by them. In the theatre the most popular drama ever performed is that of *Hamlet*—the most intellectual and spiritual, and the least distinguished of all Shakespeare's plays for that kind of energy and action which it is supposed an ignorant audience most desires. The lecture-room of the Mechanics' Institute might be made almost as attractive an interpreter of poetry

and fiction and the drama as the theatre, and assuredly more healthy and elevating.

But still, regarding the claims of the most ignorant classes, the Institute should be made a rival to the tavern, to the saloon, to the low theatre; and for a successful competition we must learn the tactics of our enemies, and if legitimate and practicable adopt them in our policy. The scenes of depravity and vice which attract the ignorant and the weak owe their power to the natural desire for association and leisure. No doubt, a leading source of power lies in the intemperance such places foster. There is, however, much that is legitimate and just in this tendency to associate, and the Mechanics' Institute should add to its organization of classes, reading-room, and library, the attraction of society. In England, the principle has been recognised and adopted with great success. Working-men's reading-rooms add to their attractions a meeting-room for social purposes, for conversation, for smoking. In the United States, billiard tables have been added to the attractions of Y. M. C. A. Thus we have the principle suggested that opportunities for social enjoyment should be added to the facilities for mental improvement; and these attractions, if surrounded and elevated by all that cleanliness, refinement, and order can add to social intercourse, would not fail to exercise an influence opposed to that of vicious or licentious attractions. Much of the success of the Working-men's Institutes in England has been owing to the organization being largely in their own hands. It would be the worst policy to place the entire management of the Mechanics' Institutes in the hands of any one class. The influence, the sympathy, and the assistance of an educated and of a moneyed class are necessary to its success, especially in its higher educational objects. But it would be quite practicable and the best policy to associate *bona fide* working-men and women in the management of any department especially introduced for their benefit and pleasure.

#### POPULAR LECTURES.

The popular lecture has not lost any of its power or its usefulness. In town or in rural districts, a power of drawing crowds together is human and civilizing. Reading-rooms and night-classes are not social in their tendencies. The reader or the stu-

dent is, for the time being, isolated from his kind, wrapt up in his pursuit or enjoyment, and indisposed to hold intercourse with his neighbour. Our reading habits, as we pursue them now, are opposed to social enjoyment and that friendly intercourse which softens and cheers life. The influence of the popular lecture or entertainment brings us out of this seclusion and isolation, and the discussion of a common topic which interests and instructs every one who listens, awakens those sympathies which develop and sweeten social intercourse. The lecture which aims no higher than the exposition of some useful branch of knowledge possesses all these social advantages—it brings people together; it brings them out of themselves and their selfishness, and in the very fact of exciting interest on some subject outside of self, it elevates and humanizes an assembly. When the lecturer, however, adds the charms of eloquence and poetry and imagination to his expositions, the delight is not only so much the greater, but the moral and social advantages are incalculable. In this sense the appeal to emotions which bring the tear of sympathy into the eye; or which rouses a generous indignation against oppression, and wrong, and cruelty; or by innocent humour and wit, transforms gloominess and surliness or sorrow into mirth and laughter; is an ally to religion and virtue, and aids the final purpose of all education—the moral culture of man.

Very much useless censure has been cast upon the popular lectures of Mechanics' Institutes, because it has been said of them that they were superficial, that they have been amusing rather than instructive, and that the true method to master a science or an art is to study it in all its details. But instruction has not been the final object of the popular lecturer so much as suggestion and stimulus. A course of five or six lectures on Astronomy it was never pretended could make an astronomer, any more than the delightful lectures of Haydon could make an artist. But when the lectures on astronomy were illustrated by diagrams and apparatus, a very large amount of information was conveyed to the audience, curiosity was aroused, a new interest in knowledge was awakened, and many a listener has been induced and stimulated, by the descriptions and illustra-

tions of the subject, to pursue it on a scientific method, and master the details which could only be referred to in the popular lecture. In this view the popular lecture, whether it be on science, or art, or literature, while it may assuredly be made to convey a very large amount of useful and delightful knowledge on a subject not familiar to the audience, will always have the higher and wider influence of awakening an interest in intellectual pursuits.

The Reunion or Musical and Literary Entertainment, as it is called, if prepared with judgment and taste, has, to say the least of it, an intellectual tendency. The performances of amateur musicians, vocalists, and readers, may have many defects in the ears of professional people; but if these performances attract a large number of people from idle pursuits, from indoors, from low theatres, and divert them from low thoughts, their influence is undeniably good. The time may come when these entertainments shall improve in character, and the classes of the Institute will form one of the means of that improvement. Music and elocution may now be studied in the Mechanics' Institute, and when our Public School system shall recognise these arts as a necessary part of daily instruction and practice, the power to sing, especially in parts, and to read with expression and taste, will be as common as the Public School, and the public entertainment will become one of the necessary social institutions of the land.

In the meantime, let the censure upon popular lectures be disregarded. Let every effort be made to revive the old enthusiasm for these lectures. Let any and every topic, useful or interesting, be made the subject of such lectures. The country has now a large number of educated men in every profession, and if lectures of a useful kind were delivered regularly and at cheap prices—cheap as the popular entertainment—they, too, would form one of the means for improving the taste and adding to their attractiveness.

#### SUMMER PURSUITS AND STUDIES.

The arrangements of most of the Mechanics' Institutes at present are intended chiefly to give mental employment and enjoyment in the winter months. But there are good reasons and many inducements to

extend their operations into the summer season. Out-of-door exercises are, it is true, preferred in the summer time; but a system of games, with all the necessary apparatus, might with great advantage be established both in town and country districts in connection with the Institutes. The ultimate object, of course, is to secure members, and to bind them by every means to the Institute; and the interrupting summer engagements have a tendency to weaken the hold of the Institute on its members. But if every club for gymnastic exercises, racing, ball-playing, cricket, and lacrosse had its focus—its home—in the Institute, the ties would be strengthened and maintained, and the inducements to return to studies and intellectual pursuits in the winter be more practicable and easily applied. Besides all this, there is always a class of more thoughtful members, anxious to pursue study and enjoy mental exercise; an encouragement and inducement should be afforded to that class, to gratify their tastes. In the absence of a regular teacher, a Mutual Instruction class could be formed, and studies which can best be pursued out of doors, such as geology, botany, and natural history, might with every advantage and the most healthy influences be introduced. It is not too much even to conceive and trust that in a country so well supplied with trained teachers and medical men, many of whom have made specialties of some one of these or kindred studies, there would be no difficulty in securing the occasional assistance of qualified instructors and lecturers even in the summer months; and assuredly no occupation to the studious members could be of greater benefit, more delightful and sociable, than that offered by an occasional botanical or natural history excursion under the superintendence of a scientific guide.

#### THE HIGHEST OBJECT OF MECHANICS' INSTITUTES.

The object of the preceding remarks is to give hints and suggestions rather than any definite plan for the management of the elementary department of instruction in the Mechanics' Institute, with the consideration and the end ever in view that these provisions for elementary education, however elaborate and liberal they may be, are only destined to last while the education of youth is so defective and limited. The time will

arrive, and we are assuredly approaching that time, when a nation will regard the comprehensive, thorough, and liberal education of its youth as the most sacred and imperative duty of the State; when all that is needed to be taught now in the evening classes of the Mechanics' Institute to supply the defects of early education, will be taught so thoroughly and widely in the public school that the deficiency which is now the general rule will then be the exception. In the mean time, however, the organization of the Institute must aim at the higher and special objects of its existence—the Technological Education of the industrial classes.

#### TECHNICAL EDUCATION.

What is understood by technical education?—what are its requirements? The necessity for technical education is the first question. Its importance applies to every mechanical art, because every mechanical art is based upon scientific and art principles; and the nearer and the more perfectly industrial art is made to harmonize with these principles the more rapid our progress to excellence and finish of workmanship. In the construction of a building or of complicated machinery, or the making of the commonest utensil, science and art are necessary, and however much utility may be the governing principle, beauty of construction, elegance of finish—the æsthetic principle mingling with the utilities of life—give a higher value to the products of industry. But the practical workman who carries out the designs which culture has prepared is often ignorant of the principles on which he works; he is too often a mere boring machine, working blindly, almost aimlessly, certainly destitute of any art purpose or inspiration, and therefore incapable of suggestion and further improvement. In this view of the value of technical education we may conceive how much we lose by its absence—how every workshop would have its sources of inventions and improvements, and possibilities of excellence and superiority of manufacture multiplied, as every worker might be a centre from whom improvements would radiate and increase. And this view applies to every department of human industry. The decorations and furniture of our houses might be raised at little cost to a high order of beauty, and the power of producing multiplied and

cheapened so as to be placed within the reach of the classes who make them. The tailor, the dressmaker, the shoemaker, rarely think of making beauty of design harmonize with the laws of health, and the anatomy of the body they labour to clothe. Yet how much disfigurement, distortion, pain, and ill-health are the fruits of this ignorance. Fashion, which dictates imperious laws, obeys only a wayward fancy; and the possibility of fancy being guided by art and physiology, so as to combine gracefulness, elegance, and beauty of construction with ease and good health never enters the minds of the constructors or of the princes of fashion.

Now, the technical education of the worker, which is the remedy for all this costly deficiency in the world of human industries, will be best carried out in the classes of the Mechanics' Institute. Free-hand drawing from objects will no doubt in due time be taught in our public schools as widely and as thoroughly as any other necessary branch of education. But the higher principles of Art and Design demand special culture and the special opportunities for applying them to production; and before this kind of education can be appreciated, the student must be a producer—that is to say, a mechanic engaged in applying scientific principles to manufactures. Hence, however ample the provisions of the Public School may be in the future, there will always be a necessity for special instruction and study in the evening class of the Art School.

At present, however, we have no efficient provision for art instruction in our public school, and whatever facilities and inducements there may be in the increasing prosperity of the country to develop manufacturing powers, we shall still be in the condition of the nations who are "at the foot of the column." We are, therefore, urged by self-preservation, industrial success, and that proper pride which, as a young nation, we naturally feel in taking a respectable position amongst other nations, to do the best we can, in the absence of better arrangements, to establish art classes in every Institute of the country. The Institutes offer many advantages in this direction. There, more than elsewhere, the class needing this culture assemble, and, by the preparation of the elementary classes, are ready to enter upon the higher study of Technical Art. It

is true that the time of the adult, engaged during the day in working for his living, is very limited; but the study of art is not more laborious than the up-hill work of mastering the first principles of language or arithmetic, and certainly far more agreeable, as it incessantly excites and charms the imagination. When drawing was first introduced into the National Schools in England it became a question "whether the one hour per week allotted to this subject would be sufficient to give the pupils any practical power in drawing, and many asserted that the hour per week, or the forty hours per year, was totally insufficient to give even a smattering knowledge to adults of any subject, and ridiculously so to impart instruction to young children. The examination of children who had received a year's instruction of one hour per week, speedily set at rest the vexed question. By means of exercises in the subjects of free-hand drawing, geometry, perspective, and model drawing, worked in the space of forty minutes for each subject, it was found that a very valuable power of drawing had been acquired. The accurate imitation of a form in outline, cleanly executed from a copy; the power of remembering, colouring, and working out as many as six geometrical problems from a text-book containing sixty or seventy problems; the representation in outline of a geometric model drawn free-hand from the model itself, and the working out of simple perspective exercises—all these were found to be executed with facility by children of from ten to fourteen years of age, who had received a year's instruction of forty hours." Not only was this success manifested after so limited a time to study, but the authority from which this has been quoted adds that schools irregularly attended during the week were crowded on the occasion of the drawing lesson.

We have then experience and encouragement to support our efforts in raising the Mechanics' Institute to the position of a School of Arts and Design. Our present state of advancement in this important duty is very low. A large number of our Institutes, probably for want of means, confine their functions to the narrow limits of the reading-room and library—very imperfectly supplied with materiel—and to the lecture-room, in which useful and suggestive lectures are the exception, and light entertainments

by unqualified performers are the rule. But the Mechanics' Institute is there; and if the classes for elementary studies can be formed on the methods suggested in this Essay, the obligation to add to these classes the means for studying elementary art and science becomes a practicable fact, and their application a pressing duty. In France and Prussia and England, wherever art classes are formed, they are crowded by the students for whom they are specially designed—the practical mechanic and designer—and in England they are, to a large extent, self-supporting. Of course, it is understood that in the countries named there is a greater demand for skilled mechanics trained by art studies for their work. But in one view there is little doubt that the special culture of the mechanic for his work has helped very largely to create a new demand for his labour; and in another point of view it is equally true, but too often forgotten by economists, that the best way to create and nourish home industry and manufacture is to create a class of skilled manufacturers. We are destitute of a central School of Art and Design; and while manufacturing interests are said to suffer for the want of a protective tariff, it would be a wise policy if the parties chiefly concerned would invest some of their capital, or urge the Government to take some steps for establishing such a central school of this character. The central Schools of Art are the fountain heads whence flow the teaching life of the country, and neither High nor Public School provisions have a stronger claim on the Legislature than Schools of Art.

#### ENGLISH ART STUDIES.

Nothing can surpass the admirable arrangements of the Department of Practical Art in England, in its labours to spread a knowledge of art throughout the kingdom; and whatever shall be suggested in that direction in this country, we may safely take the experience of the Department to guide us in our future efforts. It is not necessary to give the details of that experience in this essay, but the following brief outline may serve to aid us in forming our views and our plans.

Two leading principles guided the operations of the Department. They were determined to introduce drawing into the public schools in the kingdom, and to make the

studies self-supporting. A very costly and ineffective system had previously been in existence, carried on by about nineteen Schools of Design. These Schools cost the country £7,750 per annum, in the form of a parliamentary grant. But in one year the Department established sixteen Schools of Art, which were carried on in a most satisfactory manner, and only cost £160 per annum. Previous to these operations, a training class for masters had been established, and subsequently art masters were prepared, and, when qualified, certificated; and none but such masters were sanctioned by the Department, while provision was made that these masters were to be chiefly paid by fees and subscriptions. Thus the system was made self-supporting. The whole curriculum of art education at headquarters was divided into six groups, having a certain number of branches of art in each. For the successful passing, in both theory and practice, of each group, an annual allowance was made to a master, varying from £10 to £15, and every other as well as this pecuniary inducement exercised to excite the desire to excel. It was also one of the characteristic features of the new system that very ample provision was made to teach art in what was called the poor schools of the country, so that art instruction was extended among the mass of the people. The Department not only prepared the teachers, but it also supplied, and still supplies, copies, books, examples, casts, models, &c., for a systematic study of art, and thus, by its superintendence and liberality, and admirable general arrangements, the Department has created a great national system of art culture, which enables England to compete with the foremost nations of the world.

It is true we have all this to initiate. We have no Department to superintend art education in the school. But the Mechanics' Institutes Association of Ontario presents the nucleus of a power of this kind, and might make arrangements to inaugurate a system by which methodical art instruction could be given in the Institutes. At present the system of instruction is unfixed and unscientific. The great majority of pupils simply learn by copying from examples, and have rarely any theory explained to them. They draw for amusement, and not for the special object of becoming skilful as artisans.

It would be a step in the right direction if the Association would make systematic art instruction, under the best teachers they could procure, one of the conditions of affiliation and support, and this initiative effort might ultimately lead to the desirable end for which all Institutes and their friends should agitate—the establishment of a great Provincial Central School of Art, on the system so successfully carried out in England.

#### SCIENCE TEACHING.

Our progress as a manufacturing and agricultural country must depend not only on our art knowledge, but also on our science knowledge, especially in the departments of chemistry, geology, mineralogy, and botany. It is true that little can be taught in the classes of the Institute. It is also true that we have an Agricultural College, where the farmer may study the science of his calling. But the efforts made in a few Institutes in this direction have their important influence. Popular and superficial as such lectures are, they suggest what is to be known—how science can be applied to production, and how the subject, the threshold of which has been touched in these lectures, may be pursued. In this regard they have a valuable tendency, and ought to be encouraged. Ultimately, it is to be hoped, courses of lectures will be delivered to classes, as indeed they are now in the Technological College of Toronto, to all students who choose to attend, on chemistry, natural philosophy, and geology. Our advanced civilization, and the rapid increase of educated men amongst us; our medical men and improved class of public school teachers, are supplying us with the means for such instruction. Many, from motives of benevolence and the pleasure of conveying instruction, would assist in this work; and as the country advances, means will arise to employ, at adequate remuneration, qualified teachers.

#### PHYSIOLOGY AND THE LAWS OF HEALTH.

Amongst the numerous subjects taught in the Institutes of the Provinces, Physiology seems to have no place. This subject, in its relation to the laws of health, at one time held a very prominent position. When Dr. Andrew Combe published his admirable work, many years since, on the Laws of

Health, other medical men directed their literary talents towards diffusing this most important knowledge both on this continent and throughout Great Britain. Great interest was awakened in the subject by these efforts, and Mechanics' Institutes not only engaged eminent medical men—Dr. Combe, the author of the *Constitution of Man*, being amongst them—to lecture to their members on these subjects; but such lectures led to the formation of classes for the prosecution of the study. Is there wisdom in endeavouring to revive these studies? Their importance is scarcely understood by the general public; yet in the application of physiological knowledge to sanatorial reforms, to the prevention of disease, to the preservation of health, they are of the first importance, and that knowledge diffused amongst the common people, who chiefly suffer from contagious diseases and a neglect of the laws of health, would not only save them from the grievous evils of disease and preventable sickness and death, but, as was very clearly shown in the Dominion Parliament in an admirable speech on sanatory reform, it would prove a great financial saving to the country.

Popular lectures on physiology and anatomy, always bearing, of course, on the laws of health, might be delivered by any medical man residing in the locality of a Mechanics' Institute; and if illustrated with paintings and diagrams, which are prepared in New York for public lectures, could be made intelligible to all classes. The subject is always one of deep interest to all; but to women, to mothers who have the charge of young children, and whose happiness is wrapt up in their lives, such lectures could not fail to be interesting and useful. To any qualified medical man, the delivery of a popular course on this subject would be an agreeable relaxation; and even if given gratuitously, the increase of reputation would not fail to be attended by an increase of practice and influence.

#### EDUCATION OF WOMEN.

In all the suggestions of this essay, it is of course intended that the education—the classes for elementary studies, or for art and science—is designed for women as well as men. It is not only as an act of justice that all the advantages of the best Institutes we have should be extended to them, but it is

for the interest of the Institute and the members. The union of the two sexes gives an attraction to every assembly, whether in the lecture room or the church, and cannot fail to be advantageous to the success of the classes; while the competition arising from the two sexes studying together would have the best effect on their educational progress. Add to all this, too, that the final purpose of all education is moral as well as intellectual, and the Institute which fails in any point to offer the highest and fullest inducements to women to become members, as well as men, will lose in finances as well as in influence and general usefulness.

#### CO-OPERATION OF TEMPERANCE SOCIETIES.

In discussing the subject of Mechanics' Institutes too much importance cannot be attached to the great moral issues of the question. The Institute may be made the agent for elevating the intellectual character of the industrial classes. It may be a most successful agent for spreading all the art and science knowledge necessary to the improvement and development of our manufactures. But its high and enduring value is, that by mental culture it gives steadiness to character, occupation to the mind, refinement and correctness to the taste, and wisdom to the judgment. It is in this light that it becomes the ally of every good social and moral movement, and of none more than that which now so much engages public attention—the Temperance cause. Prohibitory laws and the reduction of licenses for selling liquor will be of little avail themselves while there is a vast population destitute of mental occupation—incapable of deriving enjoyment from intellectual pursuits. The almost certain resort of such a class, thirsting for something to do—something to excite and carry away thought—is the tavern and the bar-room. It is certain, on the other hand, that all prohibitory laws will be more effective as they act upon an educated population. In this view of the subject the Mechanics' Institutes have special claims on the organized Temperance Societies of the country. These organizations draw the largest number of their members from the very class for which the Institutes are supposed to be established, and that class suffer the most from the vice of intemperance. Now, the Temperance organization, however laudable its object, has a very weak

point. It trusts too much to principle, and expects too much from human nature. It aims to reform the drunkard, but it offers no counter-attraction to that of strong drink. The occupation of the members in a Temperance Lodge is a dull exchange to men who have been accustomed to the wild excitement of the whiskey saloon; and hence it too often happens that the convert to temperance principles, suffering from the craving of old excitements, and finding no compensation for those excitements in the dull routine of the Temperance Lodge, lapses back into his old habits, with no desire to change them for the dull associations he has deserted. If Temperance organizations studied human nature better, they would give occupation, and the attraction of mental pursuits, to the mind too much diseased and weakened by pernicious habits to be satisfied with the change of sensual excitements for abstract principles. The Temperance Lodge could co-operate with the Mechanics' Institute by uniting the privilege of membership with both organizations. The reading room, the library, the classes, the Mutual Instruction Society, the debate, the music, and the literary exercise, would offer occupation of the very best kind to minds disordered and distempered by long intemperance; and in the mental culture, the improved taste, and the new attractions of study, as well as all the influences of a new created self-respect, there would be established a most powerful aid to the work of reformation.

#### MISCELLANEOUS SUGGESTIONS.

The importance of making the Institute attractive has been frequently urged in this essay; and in view of the attractions which vice and worthless pursuits and indulgences hold out to their victims, it is a wise policy to avail ourselves of the methods by which self-interest throws charms around temptation to make it successful, and to imitate in every legitimate way its expedients. Hence it is a safe expenditure of the funds to make the sitting rooms of the members not only cheerful, but, as far as practicable, elegant and luxurious. Many a slave to intemperance leaves the home which his vicious habits have made cheerless, wretched, and dirty, to enjoy the elegance, the light, and the luxuriance which are studiously attached to the bar-room and the drinking



saloon; and if Mechanics' Institutes could surround their literary attractions with the brightness, warmth, and comfort of the whiskey saloon, add to the reading-room a conversation-room, supply the members at a moderate cost with refreshments, especially tea and coffee, and allow the same freedom of intercourse and opportunities of innocent occupations and enjoyments which give to the tavern some of its attractions, the industrial classes would have less reason and less inducement to frequent the tavern, and in the new habits and higher tastes formed, the home would change its gloom, and dirt, and wretchedness for the comfort and elegance demanded by improved tastes.

The popular entertainment has its place and its value in the organization of Mechanics' Institutes. It may be made the agent of high and refining enjoyment, and may lay the foundation of a taste for music, the arts, or literature. But there is no branch of the Institute duties that requires more care, vigilance, oversight, and caution to give the high moral effect to the public entertainment. The programme of the entertainment should be examined by the managers, and the character of the performers. Everything opposed to good taste, good manners, purity of sentiment, and elevation of mind—everything low in tone, leaning towards sensuality or unhealthy sensationalism, or calculated to bring the pure, the good, and the beautiful into ridicule, ought to be expunged. It is too true that low entertainments marked by sensationalism and gross buffoonery are popular, and fill the hall and the treasury of the Institute. But the right estimate of its mission and its destiny regards it as the ally of the Church and the School—an agent for the moral and intellectual advancement of men, and therefore diverted from its great purpose, and desecrated to vile uses, when used for entertainments that vitiate and corrupt their audiences. It is one object of these entertainments, as well as of the popular lecture, to elevate the intellectual tastes of the members; and although the low entertainment may, while public taste is low, pay the best, a persistent effort to refuse the low and encourage the high would in time cultivate a purer taste, and amply repay the Institute for its temporary sacrifice.

It has been suggested in these remarks

that Government aid should be granted more liberally in support of the Institutes. It is, however, not proposed, nor at all contemplated, that the nation should do all, and the classes for whom the Institute is to supply great advantages nothing. For all benefits given the members ought to pay as high a fee as their means will allow. But besides this, the wealthier classes have a direct interest in sustaining the mechanic's interest. Employers have an interest in getting skilled, educated, and honest employees, and not only have the Institutes a claim upon their finances, but it is the interest and the duty of all employers to urge upon their servants, whatever position they may hold, the importance of becoming members. There are employers blind to their own interests, who believe all they are required to do is to pay the wages of their employees, and often they suffer, and beyond calculation they lose, from the ignorance they encourage or the indifference they create. There are also employers who regard studious and reading habits with doubt or with antagonism. They believe that the love of reading, or that mental pursuits are inimical to business habits. But it is almost inevitable to young men, that if they have no intellectual resources and enjoyments, they will have recourse to gratifications of a doubtful, if not of an assured vicious character. Few employers meet with honest and skilful servants, whose only study and delight are to attend to the routine of daily work. All need relaxation and change of occupation. It is only extreme dullness that requires no change in the daily life, and if employees, after the labours of the day, have no mental resources, the probability is that their leisure hours will be spent in the saloon or in worse scenes, and that the employer who thinks it possible to make the whole mind of his servant slave to his interests and wishes, will sometimes have to suffer from fraud and dishonour, because he expected dullness to be honest than intelligence.

The Mechanics' Institute is as much a fact and necessity of civilization as the Public School or the University. It is demanded on the very conditions of industrial life. It is established to complete the work of the Public School—to fill the same position to the industrial classes of every kind as the Club and the Literary Society fill in the lives

of wealthier classes; and while it already affords enjoyment and occupation to many who have been fortunate enough to possess higher tastes, its destiny is to enlarge itself—to become the popular College and Reading-room and Library and Lecture-room. Just as our Public Schools increase and improve, Mechanics' Institutes will grow and

increase, to continue the work of industrial education, and to satisfy the intellectual wants of their members; and it is therefore the wisest policy as well as the duty of the nation and the Government, to support and foster the Institutes, and increase their numbers and strengthen their powers.

### SYNOPSIS OF THE OTHER ESSAYS.

ON the 22nd of Dec. 1875, the Association of Mechanics' Institutes of Ontario offered two prizes of \$40 and \$20 respectively, for the best and second best Essays on "Mechanics' Institutes and the best means of Improving them." Fifteen compositions were sent in, the prizes being awarded to the two essays in the foregoing pages (Nos. 14 and 15). The mottoes of the fifteen essays were as follows:

1. Perseverance is better than talent.
2. Union is strength.
3. Tell me not in mournful numbers,  
Life is but an empty dream.
4. Labor omnia vincit.
5. Perseverantia omnia vincit.
6. Pro bono publico.
7. Rex.
8. Archimedes.
9. Non sine labore.
10. Suum cuique.
11. Progression, extermination, and repudiation.
12. Libraries were intended for the perpetuation, the increase, and diffusion of knowledge.
13. Arole.
14. To make the Mechanic a better man,  
the man a better Mechanic.
15. To make the man a better Mechanic,  
and the Mechanic a better man.

It having been thought that a useful purpose might be served by making a brief synopsis of the improvements suggested in

the essays which were not successful in getting a prize, the authors were written to for permission to use their essays in this way. The required permission was given by all the writers except one, that of Essay No. 12. The following is the synopsis which has been made of the unsuccessful essays, other than the one just mentioned.

#### STIMULATION OF THE DESIRE FOR KNOWLEDGE.

No. 8 thinks it "desirable that measures be adopted by the Central Association to beget in the minds of Mechanics generally, a greater thirst for knowledge, especially in those particular branches of information which more intimately relate to their professions." To effect this he suggests "the delivery, by persons of high qualifications, in each town and larger village of the Province, and at moderate rates of admission, of two or three lectures upon the principles and progress of the Mechanic Arts generally; also the publication of a periodical devoted to the interests of Mechanics."

No. 9 thinks that Mechanics' Institutes "can only be increased in usefulness by an increase in the demand for moral or intellectual occupations." "We must first see," he says, "whether they address themselves to the task of supplying any actual needs of men in general, or whether they can only hope to supply a few of a particular class.

It is, however, one phase of moral and intellectual wants, that those who most need such supplies are most ignorant of their need. Men must then be educated to feel this need." He thinks that the Mechanics' Institute should "begin afresh," and "ascend a wider platform. It should change its name into that of an Institution for promoting knowledge among all classes," becoming, in some measure, "the successor to [*i. e.*, continuing the work of] the Public Schools."

#### CANVASSING FOR MEMBERS.

No. 1 proposes that a canvass should be made for new members, and is confident that many members could be thereby secured.

No. 6 thinks the Directors might constitute themselves a body of voluntary canvassers, or they might appoint a paid canvasser, and should take care to have their cause well advocated in the local press.

No. 7 recommends that cards should be posted up in workshops, &c., drawing attention to the principal attractions of an Institute, stating fees, &c., so as to procure new members.

No. 13 suggests that in cities where large numbers of tradesmen and labourers may be met with in one establishment, sub-committees of Institute members should be appointed to induce their shop-mates to join. To help in this work, small printed slips, handbills, or cards, stating the terms of membership, &c., should be distributed.

#### COMPLIMENTARY TICKETS.

No. 10 suggests that Institutes might be made more popular if each member were allowed a limited number of complimentary tickets, permitting one admission to the rooms of the Institute. Many who were not members would thereby be drawn from other places of resort, who by the social intercourse of the Institute would be induced to become members.

#### READING ROOM.

No. 2 urges that the reading room "should be comfortable, spacious, and in every way attractive; such, in short, as should successfully rival bar-rooms or drinking parlours."

No. 7 recommends that the rooms be "cheery, bright, and cosily furnished."

No. 8 recommends that library and reading-room should be made "as comfortable and attractive as possible."

No. 11 thinks that enough copies of the local dailies should be in the room to prevent waste of time by members in waiting to read them.

#### LIBRARY.

No. 1 proposes that the books in the library should be railed off, so that they should not be handled by the members, but handed down by boys. There would be less rummaging of the books, and fewer stolen.

No. 5 thinks the library should contain entertaining works, such as "well-selected novels, interesting travels, voyages, and adventures, and other works which would attract the attention." He urges that "if we succeed in inducing a man to read, a great point has been gained," and that he will afterwards "pass on to books from which valuable knowledge and instruction may be derived. But the first object should be to please."

No. 6 says a good library is "one of the best methods of diffusing knowledge, and of continuing and extending that which has been done in our schools." He thinks a committee should be appointed for the purchase of books; and that great care should be exercised in the selection of works of fiction, only those of the best authors being chosen. He also thinks that, to obviate the difficulty often experienced by Institutes in getting the books they require, the Association of Mechanics' Institutes should establish an agency, whereby Institutes could have their orders filled promptly and correctly.

No. 13 recommends that the library be made attractive; maps and natural history and mechanical charts should grace the walls, and specimens of the work of the class-students in writing, drawing, and modelling should be exhibited for a time. Books should not be made to look repulsive by being put in brown paper covers. Healthy fiction, he thinks a prime necessity; and the newest popular works on scientific subjects should be got. A list of the new books purchased should be hung in the library, as often as additions are made. The selection of books should be such as "to offer some special inducement to persons of every avocation."

## CLASSES.

No. 2 proposes night classes for teaching the English language and composition, in order to supply the great deficiency at present existing in this branch of education. "The plan should include grammar and style, and the examining and discussing of the best writers of our language." He also advocates classes for teaching vocal music, for reading aloud, discussions, mathematical branches, foreign languages, and criticisms of the productions of our best authors. He thinks that they should be rendered attractive, and that "if a moderate fee were made payable," the "classes would soon become self-supporting."

No. 4 thinks that "a number of Institutes might unite, and secure the services of good teachers in those subjects which mechanics require. If a sufficient sum were paid to secure the whole time of the teacher, and branches of the main association were organized in each village in a county, all might be benefited in turn." The county association should have a library, from which any member in any part of the county could draw books.

No. 5 thinks classes have been added "with most beneficial results." He advocates classes for drawing and modelling, which have "for their object the teaching of mechanical, architectural, plain, and ornamental drawing and modelling, and afford mechanics, and more especially apprentices, an opportunity of perfecting themselves in the principles of the various trades to which they belong."

No. 6 thinks "Institutes may improve their usefulness by means of evening classes," and that "Directors should secure the services of competent teachers."

No. 7 recommends a night-school, where the principal branches of an English education might be taught; also, Latin, German, French, and other languages, for the benefit of persons beginning to study law, medicine, and theology.

No. 8 recommends evening classes in the "ordinary branches of an English education," and also in "the elements of physics, mechanics, and chemistry;" and that provision should be made for "meetings by sections for the discussion and friendly interchange of individual views on the topics introduced in the classes of instruction."

No. 10 recommends a "Mutual Instruction class, in which young men should arrange to deliver lectures on some branch of the arts, sciences, or manufactures." The lectures should be illustrated, questions should be answered at the close, and prizes should be awarded to the most successful member. Each member of the class to be allowed to introduce friends.

No. 13 thinks that large additions could be made to the attendance on classes by exhibiting in offices, stores, and workshops, fairly executed *bona fide* specimens of students' work in penmanship, drawing, and modelling.

## LITERARY OR DEBATING CLUB.

No. 1 thinks that debating clubs would have a great tendency to attract people, and bring out any debating power or versatile talent.

No. 2 thinks that, if properly carried on, they are capable of being made very useful.

No. 7 recommends the formation of a scientific and literary club, "for the purpose of conducting debates, hearing essays, and proposing and answering questions on all kinds of subjects." Models and plans might be solicited from young members who are mechanics, "to be placed on exhibition and subjected to the criticism of members." The club "should be divided into three classes, distinguished by the ages of the members, and the length of their connection with the Institute, and initiation into the older clubs should be deemed an honour." The youngest club to be for those under twenty-one, the second club for members above that age, and the club of elders for all who have filled offices in the Institute.

## LECTURES.

No. 2 thinks lectures well worthy of being encouraged, but that they should be regarded in their true light, viz., "not so much as being a means of instruction, as a source of intellectual treat, a mental recreation, or as an incentive to look further into the subject."

No. 5 thinks "lectures are useful, not so much from the knowledge they impart, as from the desire they create to learn more," and that they should be of such general interest as will attract the curiosity and arrest the attention of young men.

Nos. 6, 7, and 11 also advocate lectures.

No. 13 thinks lectures often failures, and less useful than reading a good book on the same subject. He says: "What we want to *hear* in a lecture is, in our day, quite of secondary importance to what we want to *see*. Object teaching is just as much a desideratum for adults as for juveniles, and if any course of lectures, scientific or otherwise, can be arranged that will introduce this method of instruction, there will be no lack of hearers. The truth of this view becomes obvious when we reflect upon how much the working-man has to do with *things* not *words*. A first-class mechanic works from drawings and patterns." He also suggests that in Toronto the theatre of the Normal School should be utilized for Institute Lectures.

#### READINGS.

No. 2 advocates readings, as being an "excellent means of improving the taste, and giving intellectual pleasure."

No. 6 also advocates them.

#### MAKING INSTITUTES ATTRACTIVE.

No. 10 thinks "the success of societies for amusement, such as singing, skating, curling, and many others, notwithstanding their great cost when compared with Mechanics' Institutes, and the many amusements now very properly provided in private families, all converge to one point, the necessity for relaxation to the overworked brain of man." He thinks, then, that there is "a legitimate field open to the Mechanics' Institutes by which they may regain their position, secure popularity, and successfully fulfil the objects for which they were established. viz.: by combining social attractions with the advantages they at present offer. Intellectual knowledge must not be the only attraction. Relaxation, mental and physical rest, and social converse would be more potent."

#### GAMES AND AMUSEMENTS.

No. 1 advocates the establishment of a billiard room, bowling alley, gymnasium, and smoking room, "without the degrading accompaniment of drink." The smoking room should be for the convenience of members, so that they might have "some place where they could lounge at their ease."

No. 2 doubts whether smoking and billiard rooms would promote "the objects for which Institutes were established, viz., the mutual improvement of all the members by the combined strength and influence of individuals."

No. 5 says, "there is a craving in Nature for amusement, and, like other desires, it must be gratified;" and he advocates the introduction of games such as chess or backgammon, and the establishment of a gymnasium. "Make the Institute attractive," he says, "and the problem of success is solved."

No. 7 recommends a gymnasium.

No. 10 thinks that "if comfortably furnished rooms for conversation, a chess room, rooms for billiards, bagatelle, chequers, smoking, and any innocent amusements, with facilities for obtaining tea and coffee, were added to the reading room and libraries, many of the working class would frequent saloons less, become members, and eventually would reap the benefits which the Institutes were designed to distribute. In small towns a gymnasium might very properly and profitably be added."

#### ENTERTAINMENTS.

No. 6 advocates concerts.

No. 8 recommends "occasional social reunions of the members and their families at soirees, festivals, &c.," and "the mutual visiting of members of neighbouring Institutes."

#### LOAN EXHIBITIONS.

No. 5 thinks that "the plan which has recently come into vogue of inviting possessors of rare and beautiful curiosities, &c., to send them to the Institute upon a certain day, to be viewed by the public generally, is a capital one. Everything is carefully arranged and numbered, a catalogue is printed, and a small entrance fee charged."

No. 7 recommends "scientific exhibitions, displays of specimens of art, mechanical apparatus, &c."

#### MUSEUMS.

No. 5 advocates the establishment of museums in connection with Institutes, containing "specimens of mineralogy, chemistry, geology, botany, the various inhabitants of earth, air, and water, coins of nations ancient and modern, casts of statues, war

implements of barbarous tribes, and in fact everything" coming "under the head of curiosities." These should be "carefully marked and catalogued."

No. 11 also advocates the establishment of museums.

No. 13 thinks that, "in a city like Toronto, the collections of specimens in the University, Normal School, and School of Technology should be available for Mechanics' Institute purposes. These collections are the property of the country, and ought to be of more use than as mere curiosities in a free show." He also suggests the formation of museums in connection with Institutes in smaller places. Prizes for the best models might be offered.

#### FEMALE MEMBERS.

No. 7 recommends that young women "should be induced to take some part in the working of the Institute;" and that "domestic economy should be the chief feature of the studies brought under their notice, and a female class for discussing subjects pertaining to their position in the world and society. Essays might be solicited from them on such topics. A night-school for instruction in the English branches, music, and drawing, with the liberty of exercising in the gymnasium, would be a great boon to many young women in the cities and large towns."

No. 10 thinks ladies should be encouraged to take a more prominent interest in the Institutes by allowing them to elect two lady subscribers to seats on the Board of Management, and that reading-rooms should be provided for their especial use.

No. 13 thinks something should be done to bring in as members "the scores or hundreds of sewing-girls and servant-girls to be met with in every town;" and he suggests "a personal canvass, the circulation of small printed slips, and a standing invitation suspended in their work-rooms stating terms of membership," etc. He also thinks the Institutes might be popularized by electing a few ladies to act on the general committee, or by the formation of sub-committees consisting wholly of women, who could disseminate information in regard to the Institute. He also suggests that working-women should be admitted to membership at reduced rates.

#### OFFICERS.

No. 10 thinks no member should be eligible for office unless he has been a Director for at least one year, ornamental officers not being desirable or advantageous. He also suggests that only one-half of the Directors should retire annually.

No. 13 thinks the working-man should be made to feel perfectly at ease during his membership, and that "anything calculated to make him conscious of his inferiority is quite certain to disgust him, and few things are more likely to produce such an effect than the too common practice of electing Presidents, Vice-Presidents, and Managing Committees with scarcely one member, it may be, to represent the mechanic. Of course, the best men in the Institute should be chosen to fill the offices, but such a choice should be made invariably as will include the more intelligent working-men."

#### LEGISLATIVE GRANTS.

No. 6 thinks that Mechanics' Institutes "are not treated with the same liberality as other Provincial Associations, viz., the Agricultural, Horticultural, Fruit Growers', and Entomological Associations." He thinks that the Legislature should also "make it lawful that Municipalities should give a yearly grant in a certain proportion to the legislative grant." [\*]

No. 8 thinks "a wiser discrimination is required in apportioning the amounts offered in premiums by the Agricultural and Arts Associations, provincial and local, with a view to afford additional encouragement and recognition of mechanical skill."

No. 9 thinks the Government should endow the Mechanics' Institute "as an educational establishment, by establishing lectures on all scientific subjects, beginning at the very first principles of each subject."

#### JOURNAL.

No. 3 advocates the publication of a good monthly or fortnightly periodical devoted to the interests of Mechanics' Institutes.

[\* It is lawful. See section 113 of "The Agricultural and Arts Act," 1877.]

No. 6 thinks that if any means could be adopted whereby Institutes "could be brought to act in concert in any matter affecting their welfare, much good and improvement might be effected."

No. 8 recommends "the publication of a periodical devoted to the interests of mechanics."

AMALGAMATION WITH YOUNG MEN'S CHRISTIAN ASSOCIATIONS.

No. 7 recommends the amalgamation of Mechanics' Institutes with Young Men's Christian Associations, "making one library answer the purposes of the two bodies, and permitting the separate organizations to exercise their different functions without collisions of sentiment."

VISITATION MEETINGS.

No. 10 thinks that "much practical information and assistance could be afforded to the Institutes throughout the Province, by the Mechanics' Institutes Association holding visitation meetings three or four times in the year. The meetings should be held at the various Institutes in rotation. One of the officers and the Secretary of each Institute should be delegates to the meetings, whose expenses should be paid by the Association," the additional expenditure to be met by abolishing class prizes. These visitation meetings, he thinks, "would, without doubt, be productive of abundant fruit in the practicable suggestions which would be given and received."

CORRIGENDA.

Page 11, 1st column, line 9. There should be a full stop after the word "tastes," and the word "weak" should begin with a capital letter.

Page 13, 2nd column, line 18 from bottom. Change the word "boring" into "living."

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