arbitration was in our opinion not a wise procedure. Apart from the question of wages, the unions want to have a hand in regulating the employers' shops. The latter insist that so long as they pay the salaries they intend to manage their affairs in the way that seems to them best. This we think they have a perfect right to do. The members of the union may refuse to work for an employer who thus insists upon being the sole manager of his business, but they have no right to interfere as they are said to be doing with workmen who are satisfied to receive their wages and leave their employers to do the managing. A couple of the strikers have been heavily fined by the police magistrate for alleged intimidation of workmen brought from other cities to fill the positions which they had vacated. Our sympathies in this instance are with the strikers; as we cannot see from the evidence wherein the intimidation took place. Since the decision of the police magistrate, however, some of the strikers appear to have resorted to intimidation and even to violence in order to prevent the employers from carrying out their contracts. The fact that the workmen imported by the masters have had to be guarded by the police, does not reflect much credit upon the methods of the strikers, nor does it tend to arouse public sympathy in their behalf. In conflicts with the employers the unions should discard physical violence and the boycott as likely to defeat rather than promote the objects they have in view. Since the above was written the steam fitters have joined in the strike, and the situation is thus made worse than before.

THE Toronto Trades and Labor Council has resolutely set its face against the movement to instruct the pupils of the public schools in the rudiments of practical mechanics and in the use of tools. The Council recently appointed a deputation to wait on the Minister of Education to endeavor to persuade him not to carry out the proposal. The result of the interview is thus stated in the Committee's report to the Council:—

"Your committee, as per instruction of your body at a recent meeting, secured an interview with Hon. G. W. Ross, Minister of Education for the Province of Ontario, for the purpose of laying before him the views of your body respecting this proposed scheme for introducing manual training in the public school system, with a commencement in the Provincial Model School at Toronto. Your committee were received with that courtesy and urbanity characteristic of that honorable gentleman, and at his instance each member of the deputation, which included the president of your body, spoke his views on the subject, and in opposition thereto. During the two hours' discussion of the question in all its phases every feature of the proposed movement on the part of the Ontario Government received ample consideration, and during which the honorable the Minister of Education, while holding strongly to his contention that no injury to, or interference with mechanical interests was intended or possible through the intended innovation, affirmed his adherence, for the time being at least, to his own view of the subject. Your committee, failing to convince him of the soundness of the views of your body, or those of your committee, in opposition to the manual training feature already referred to, and, being still satisfied that, if inaugurated, a course of manual training, as outlined by the Minister of Education, will result in no good at all commensurate with the amount of certain harm in an aggravated form which must ultimately ensue to all who live by mechanical callings in Ontario, unhesitatingly recommend that every legitimate effort be put forth by your body, by seeking the active co-operation of all labor organizations throughout Ontario in petitioning the Government, and Parliament when in session, and the taking such other action as may be deemed advisable in opposition to the adoption by law of this scheme on the lines outlined."

We very much regret that we have not before us the arguments presented by the deputation to the Minister in support of their contention that manual training in the public schools would result in "certain harm in an aggravated form, to all who live by mechanical callings." Let us hope that they were more logical than the reason before given by the Council, viz., that such training would tend to swell the ranks of botch workmen. Experieace has demonstrated that youths who have had the advantage of technical instruction previous to entering the workshop, as a rule make more rapid progress and attain to a higher standard of skill than those without such training. This fact goes to prove that the tendency of the training is to increase the number of highly skilled mechanics rather than to create botches. But supposing the result should be the reverse of this, union men who are skilled mechanics would not suffer in consequence, for the simple reason that a botch can never do the work of a skilled mechanic.

Unfortunately, the labor organizations have devoted all their attention to securing for their members the largest possible remuneration for the least amount of work, regardless of whether they are botches or skilled workmen. No effort has been made to elevate the standard of workmanship. No standard of workmanship is required as the condition of membership in the organization. The declaration of American independence begins with the statement that all men are born free and equal. The trades organizations appear to work on the principle that all men—mechanics at least—are equal in their capabilities, and continue to be so during their lifetime. A standard of wages is fixed for all alike. No encouragement is offered to a man to strive to excel in the particular trade in which he may be engaged. For this reason we find about as many botch workmen in the membership of the labor organizations as out of it. Manual training in the schools might be expected to assist in developing a class of educated mechanics whose skill would entitle them to supplant many indifferent workmen of the present day who claim first-class remuneration for their services, not because of their ability to earn it, but because they are members of a labor organization which demands that they shall have it.

A representative body of workingmen is certainly the last quarter from which opposition should come to a movement which has as its object the imparting of a class of knowledge calculated to prove of practical benefit to the boys and girls whose circumstances in life or whose natural inclinations and adaptability destine that they shall engage in mechanical pursuits. As we pointed out in these columns recently, the class of instruction heretofore given to the pupils of our public schools has tended to overstock the ranks of the professions at the expense of mechanical pursuits. Yet the moment that an attempt is made to correct the error, the persons whose children would be most benefitted thereby are the first to throw obstacles in the way. We can only infer that they would rather see their children struggling to attain a bare livelihood as lawyers, doctors or some other "genteel" calling than earning a competency in the less crowded through humbler pursuits of life.

We are not surprised that the Minister of Education remains unconvinced by such short-sighted reasoning. We hope that he will persevere in his purpose, in which case no one will be less liable to suffer injury than the working mechanic.

WOOD FOR DECORATIVE PURPOSES.

IT is evident that much as we know about woods there yet remains much to learn that may be of value in the arts, says an exchange. The secret of making good veneers which will not warp is only now becoming known, and until lately it was considered impossible to emboss wood; but now beautiful embossed panels, whose work resembles carving and whose richness compares favorably with the most costly art, are found in many places. In these the original patterns are carved by hand, and from these molds are made on which the wood is placed after being properly softened. The wood in these molds is then submitted to 250 degrees of heat and subjected to great pressure. Such a pressure effectually prevents all shrinkage. Wood may be cut as thin as the 300th part of an inch, but in this state is not useful. That which is cut to the thickness of the 100th or the 150th part of an inch and lined with paper is used for the decoration of walls and ceilings. This neither shrinks nor swells, there not being enough of it for the atmosphere to lay hold of. If it is desired to place such a veneer upon a wall, all holes and cracks must be filled with plaster of Paris, and being glue sized, the wall is ready for the wood in panels. The veneers are made damp with a preparation of glycerine and water which softens them, and when dried leaves them pliable. A checkerboard pattern of curled maple is about as thick as a piece of cardboard. To produce this, strips of wood are first woven in and out and then subjected to heat and pressure, which makes a smooth body, varied in hue as if it were made of two kinds of wood.

Prof. J. B. Johnson, of Washington University, St. Louis, stated that in the physical laboratory of that institution it is proposed to make exhaustive tests on the transverse strength of various timbers. It is intended to make these tests standard authority for all engineering structures and for this purpose efforts are being made to raise from $2,500 to $5,000.

TORONTO BOARD OF TRADE BUILDING COMPETITION.

WE have received from the Secretary of the Toronto Board of Trade a circular in regard to the competition which reads as follows:

The Committee, by and with the advice of their professional adviser, have decided, in accordance with suggestions or requests of competitors, to amend the conditions of competition in the following respects:

1. The party wall on the *eastern* side of the lot to be disregarded, and a new wall built entirely independent of it.

2. The point of sight indicated on the plan already furnished to be changed, and to be taken at a distance of 200 feet from the angle of the lot, near the western corner of the custom house.

3. The perspective to be set up from a *one-eighth scale* instead of from a *one-quarter scale* plan, as asked for in the conditions.

4. The Committee's professional adviser reports as follows: "It seems to me that paper 18 inches by 26, as required in the programme (not 36 as your correspondents erroneously quote it), is amply large for all these purposes. It allows a tower 200 feet high; if a higher tower is to be shown the upper part can be drawn on a flap. Moreover, all the plans, except perhaps those of the basement and first storey, can be shown two on a sheet, if desired. I should not recommend larger paper. It is essential to the convenient handling and examination of the drawings that they shall be made on as small sheets as possible. Moreover if all the plans are on one sheet, as suggested, it is an inconvenience to the architects, as only one or two men can work on them at a time. Besides, it is a bad plan to change the conditions at this time without necessity."

OFFICE EXERCISE.

WHILE a pair of dumb-bells or clubs or some form of gymnastic apparatus is occasionally to be found in a business office they are usually provided by some one for his private use, and though doubtless efficient in promoting health and vigor as far as used, the office at large profits but little by them, and the valuable stimulus of emulation is almost wholly lost. As a rule if gymnastic exercises are permitted at all they are rather tolerated than encouraged, and for an employer to provide anything of the kind for those in his office is very rare indeed. So rare that we do not remember to have heard of it.

We are, therefore, much gratified to learn that Burnham & Root, architects, of Chicago, have set a most commendable example in this respect by fitting up a large room in their suite of offices as a sort of gymnasium. In response to an inquiry, they say: "It is used as a lavatory and exercise room, and is furnished with wardrobes Indian clubs, dumb-bells, pulling machine, foils, etc. It has a good effect on the health and spirits of our boys," and they add, "who are exceptionally good fellows and deserve all one can do for them." We have no doubt the "boys" reciprocate the feeling, and whether Burnham & Root in fitting up this room were influenced by pure disinterested benevolence or an intelligent self-interest, or a wise combination of the two, we believe they will find it merely from a business point of view a very profitable investment.

The restless discomfort which comes from long stooping over a desk or compressing one's liver for hours on the edge of a drawing board, is apt to seek relief in skylarking or idleness, or if the conscious clerk or draughtsman still sticks to his work it is with reluctant fingers and beclouded bram, and the "output" deteriorates both in quality and quantity.

In such a case five or ten minutes' brisk use of the clubs or chest weights will accomplish more than an hour's skylarking or any amount of loafing. It has a wonderfully good effect in quickening the stagnant circulation, and a clear head and strong hand take up the work with renewed vigor.

It is surprising what a little vigorous exercise will accomplish if systematically taken. A few minutes once