

this official. The fixing by the government of the rate of wages to be paid workmen should be of some advantage to contractors, and will at least tend to equalize to a greater degree than heretofore bids for public works. Another effect of the measure will be the employment by contractors for works of this character of only the most rapid and skilled class of workmen. Whether or not this will result in raising the standard of workmanship will depend to some extent upon the amount of employment afforded by government works.

In connection with the newly established Department of Labor there will be published an official journal called the Labor Gazette in which will be printed statistics, copies of legislation, reports of legal cases affecting the interests and rights of workmen, etc. Several correspondents have been appointed to report to the department the rates of wages and labor conditions in various centres of population. The first number of this publication contains a complete list up to the end of August of all contracts let by the Department of Public Works since the adoption of the Fair Wages Schedule. In connection with this list the schedule of wages to be paid by the contractors on these contracts is also given; such information should be of value to the contractor as well as to the workman.

In addition to the legislation above referred to there has been put on the Statute Books a Conciliatory Act which provides for the appointment of a conciliator by application of either of the parties to a dispute, the appointment of an arbitrator on application of both of the parties, and under certain conditions a commissioner or commissioners to hold an enquiry under oath where, for the better settlement of the disputes, such course is deemed desirable. This Act, which is based on similar legislation previously in force in Great Britain, Australia and elsewhere, provides the machinery whereby disputes between employer and workmen may be adjusted, and is designed to reduce the number of strikes. It is, however, a purely voluntary measure, inasmuch as the Dominion Parliament has not the power to pass a compulsory measure. This power, affecting civil rights, resides in the Provincial Legislatures.

There appears to be need for the adoption by Canadian architects and builders of a standard form of contract. Enquiry shows that there are at present in use many different forms—as many perhaps as a dozen in the city of Toronto alone—while various forms are also in use in the other cities and towns of the Dominion. Many architects, especially the younger members of the profession, seem to prefer to use special forms of their own. The desire to maintain friendly relations with the architects and the keenness of competition, has induced contractors to sign contracts, the terms of which they did not always regard as being entirely just and satisfactory. Some 15 years ago a form of contract was agreed upon between the architects and builders of Toronto which was found to be equitable and was generally used for many years. Gradually, however, by reason of changing circumstances new forms were introduced, and the number has steadily increased. The time seems to have come when an effort should be made to draft a standard form of contract which should conserve the

rights of all parties concerned, and which would be likely to come into general use throughout the Dominion.

HOT WATER VS. STEAM HEATING.

OCCASIONALLY one meets with a person who is an ardent advocate of steam heating for dwelling houses, and one or two instances come to mind in which the advocates of steam have shown their faith in the system by installing it in their houses. Enquiry shows, however, that steam heating for dwellings is not generally popular and is not increasing in favor. The demand for the hot water system on the contrary, is constantly increasing, and this fact alone is the best evidence of its greater suitability for house heating.

Fifteen years ago steam and hot air were exclusively used for heating houses where furnaces were employed. One of the largest manufacturers of hot water apparatus sought to at that period introduce the hot water system into the eastern States and met with great difficulties. The steam-fitters who had become familiar with the installation of steam heating apparatus knew nothing about hot water plant, and apparently did not wish to take the trouble to learn. At first none of them could be induced to put in a hot water system, but the manufacturers were determined that the system should be introduced, and upon obtaining an order, sent their own men to put in the apparatus. In this way the steam-fitters were gradually forced to give attention to the new method and undertake the work of installation.

To-day the great majority of houses of the better class are heated by hot water, and no steam-fitter is presumed to understand his business who cannot install a hot water system. There are many advantages connected with the hot water system as compared with steam heating. It is, in the first place, more economical, much less fuel being required than where steam is used. The regulation can be adjusted to suit climatic conditions, while with steam the same degree of heat is maintained at all times. With hot water the heat is retained by the water for some time after the fire has been extinguished. With steam the radiators cease to give out heat immediately that the temperature in the boiler falls below 212 degrees, and in starting up the system this temperature must be reached before any heat is available, while with hot water when the temperature reaches 35 or 40 degrees, radiation of heat commences. There is also with hot water heating the advantage of greater humidity of air as compared with either steam or hot air. The value of this greater moisture in the air to the health of the occupants of dwellings need scarcely be dwelt upon.

While steam heating is not well adapted for dwellings, it is undoubtedly superior to hot water or any other method for public buildings where some of the rooms may at times be vacant. Hot water would be liable to freeze in the pipes in such rooms. It is also, as stated by Mr. Robert King in the paper published in the last number of this journal, best adapted for large greenhouses, as the heat can be forced more rapidly through long stretches of pipe, while with the spraying apparatus, which is a necessity in all large greenhouses, the required humidity in the air can easily be supplied.

Plain English and plain type, well put together, have made more fortunes than all things else combined.—Press and Printer.