

Wolff, based on German experiments. These values are reproduced in a table herewith, the first column giving the conductance, in British thermal units per hour, and the second, the reciprocals, or heat resistances. It will be noted that there is an irregularity of the differences in the value of the resistance for each increase of 4 inches in thickness of brick walls, which the author holds to indicate a difference in the conditions of the experiments. He finds the average difference is 0.80 and that the approximate formula for the resistance is $0.70 + 0.20 t$, in which t is the thickness in inches. In the third and fourth columns are given the revised values of the resistance and conductance, respectively ascertained in accordance with his formula.

—Engineering Record.

NORTHWEST LETTER.

WINNIPEG, MAY 11, 1903

The open spring this year has been most favorable for building of all descriptions and has allowed the work to get under way considerably earlier than last year. Excavations, large and small, can be seen everywhere from the centre of the city to the outlying districts in the suburbs, and everything is activity in the building line. Some of the foundations of the smaller work have already approached the ground level and where the building is frame many are well covered in.

Before taking up the new work it would be in order to mention the two or three large works that were started last year and are now at the point of completion.

The Strathcona Apartment Block is the most noteworthy in this list. It is a building that will be welcomed by the great class who live in "Rooms". The population of Winnipeg has increased so during the past twelve months that house accommodation has become a most serious question and one that is already having an adverse effect on incoming residents and resulting in temporary detriment to the city. The opening of the Strathcona will therefore be heralded with delight by a host who at the present moment may be living more or less like sardines in a box. It will relieve the pressure in this direction to some small extent, but will not in any way settle the important question of housing. Winnipeg is a most favorable place for apartment buildings as the population for the most part is a very transient one and buildings of this description are ensured financially as being a most paying investment. To describe the Strathcona building is not a very serious undertaking as everything inside and outside has been carried out in the most simple manner. The building is constructed of the common gray brick, it is four stories in height with a high basement. On plan it is a square with a large centre court. From this court is arranged an entrance in each corner to the building proper which divides the whole into four separate parts. On the ground floor, first floor, and second floor each part is divided into two suites of from six to eight rooms with bath room accommodation for each suite. The finish of the main portion on ground and first floors is in oak and on the second floor maple. The top floor is reserved for bachelors' quarters and divided into separate and double rooms. What appears to be an omission especially in a building of this description is the lack of a passenger elevator, but in the planning of the work it may have been found undesirable. The use of metal ceilings throughout is a feature that strikes one as being most objectionable, and one that would not be tolerated in a very ordinary residence.

St. Mary's Academy is another building that was started last year and will be completed in the course of a couple of months. This building has apparently been designed with the object of getting the most accommodation for the least amount of money. Externally, the work is so extremely simple and the lines so hard that the general effect is most disappointing and a crudity in design pervades the whole work. Inside everything has of necessity been kept as simple as possible and even the Chapel, which in these Institutions is generally made a special feature is, from all appearances, being treated in keeping with the rest of the work. The tenders for this building were originally much in excess of the anticipated cost and consequently everything had to be reduced to the simplest form.

St. Stephen's Church, although not yet complete, will from

present indications be one of the most interesting Churches in the City. It is faced with Tyndall stone throughout and makes a very substantial looking block. The Sunday School forms part of the same building and the uninitiated on entering is much surprised at the small area of the body of the church. This of course may not have the same effect when the seats, etc., are arranged in position. The Church will be open for service in the course of a few weeks.

Of the new work already begun the Bank of British North America is the largest. This is to be a four-storey building, the ground floor space reserved for the Banking room and the upper floors as Offices. The front will be of Bedford stone with pilasters, cornice, pediment, etc., and when completed will rank among Winnipeg's finest buildings.

The Steele Apartment Block which has already part of the foundations in is to be a brick building of simple character and has been designed on strictly utilitarian lines.

Of the Warehouses in course of construction, and there is a great number, the Stobart building is the largest. The foundation walls are now being rapidly pushed.

The postponing of the C. P. R. improvements indefinitely, is most regrettable, and it is an action that touches the general welfare of the City. The suspension of operations on this work will affect the North end most directly and will cause building in this district to be put off until arrangements have been finally decided upon. The cause of the delay is due to a question of legal claims that will be instituted against the City by property owners in the vicinity of the proposed subway. As the amount of these expected claims is an unknown quantity and might with all reasonableness reach an extremely high figure, it appears to be a most important factor in the negotiations as to who shall be liable for all such claims that may be filed. As these improvements must be proceeded with in the near future it is to be hoped that a satisfactory understanding can be arrived at immediately and work begun.

A deputation from the Winnipeg Board of Trade left here some days ago for the purpose of interviewing the Dominion Government on behalf of merchants and contractors of this city regarding the tardiness of the C. P. R. in their efforts to facilitate the shipping of goods and materials into the city. This subject cannot be placed before the Government in too trenchant terms as the prosperity of the West and especially of Winnipeg is dependent upon the speedy supply of materials from outside. If the C. P. R. officials are not at fault in this on the plea of increased traffic throughout the country the Government should take steps to devise some scheme that will insure the necessary movement of goods in this district. Building has already been stopped for several days on account of the lack of stone. The stone is quarried and in some cases loaded on the cars but the delay in the transportation of same to Winnipeg has caused valuable time to be lost by waiting.

The real estate boom here is now at its meridian, and city property is, from what I can learn, at a price it will not exceed for some time to come. Outlying districts have been surveyed and laid out, and a sufficient area has been plotted to satisfy the demands of an increasing population for the next decade. Prices asked for local farm lands are so high as to be almost prohibitive to buy even as house property. Winnipeg is flooded with a myriad of real estate agents. Every other office is occupied by a real estate man or has desk room for one, and each has his alluring list of lands for sale to proffer the would be purchaser. Practically half of Winnipeg is for sale by this horde of ephemeral land agents, who foist up the price at each transaction and through whom property in some cases attains a remarkably fictitious value.

I regret that I am not able to forward you for illustration the plans of the Carnegie public library. Two sets of drawings have already been figured on, but the cost in each case is much above the stipulated cost. The plans of the third successful competitor are now being tendered on, and until the figures are received it is impossible to say what will be the next steps taken to proceed with the work of building a library.

W. PERCY OVER.

The cement, which was used in the decoration of the baptistry at Florence, was composed of wax, lime and resin. It was very good for its purpose, for it kept sufficiently moist for five to eight hours, and could during that time be worked as wax, and then it became as hard as stone and did not shrink.—Sir W.B. Richmond.