

their goods, and who combine with all the latest improvements several special features that are their sole property. One of these, which is of vast importance, is their "*Non-conducting steel flange*" for safe doors. This invention is patented, and its advantages are given below in the maker's own words:—

"During the past twenty-five years it has been our constant aim to improve the fire proof character of our safes, and we have patented from time to time these improvements.

The new Non-conducting Flange is the latest of these. It has been adopted by us, after careful and severe practical tests as to its fire resisting qualities. This change in the construction of our Safes is intended to meet the case of exceptional fires, like those of Chicago and St. John's, where for weeks together, safes were in the burning ruins. The weakest part of all safes is the door, the difficulty being to prevent the heat from passing through between the door frame and the jambs. For all ordinary fires we accomplished this with our Triple Flange of cast iron. But it has been found that in the course of years, the ordinary cast iron becomes weakened by corrosion from the chemical action of the filling, and in case of fire, when suddenly cooled with water, is liable to crack. Not only do we get rid of this drawback by the new flange, but we also secure more complete protection from fire: for instead of cast iron we now use Galvanized Homogeneous Steel, which is much stronger and tougher. The door is constructed with a tongue and groove, within the walls of which is inserted a non-conducting material, which completely breaks the connection between the outside and inside of the safe, and so effectually shuts out the heat, no matter how intense or prolonged.

Another advantage of this improvement is the lessening of the outside measurement and weight of the safe, both of which are very desirable so long as the security is not impaired or the inside capacity curtailed. While our new safes therefore will be the same size inside as before, and be still more fireproof, they will neither take up as much room nor weigh so heavy; at the same time the internal construction of the door is so arranged as to leave an air-chamber behind the filling, and by simply unscrewing the covering plate, access can be had to the lock and bolt work, which may be thus cleaned without having as heretofore to send the entire safe or door to the factory at considerable cost and inconvenience. This new style of safe having so many practical advantages can be recommended as the best now in the market."

From the above it will be seen that this improvement renders a safe as perfectly fire-proof as the ingenuity of man can accomplish, but as we have before drawn attention to the necessity of strength, in case of being subjected to unusual strains such as heavy bodies falling on it from above, we would remark that this firm make their safes with round corners, and the outside casing is made from one continuous plate, which is bent by special machinery, and the ends joined solidly together, thus doing away with the possibility of the springing of any joints: and as any joints that occur in other portions of the framework are planed very smooth, they fit together so closely as to leave no chance for the "enterprising burglar" to insert the smallest wedge, or to pump explosives into the chamber.

Messrs. J. & J. Taylor are sole manufacturers in Canada of *Combination Locks*, and in this department they turn out some beautiful specimens of workmanship. They also manufacture any other description of lock, and are the inventors and makers of the *Prison lock* adopted by the Provincial Government of Ontario.

As an example of some of the larger orders entrusted to them, we may mention that they received the contract for the Fire and Burglar-proof Vaults of the new Canada Life Insurance Co's. building at Hamilton, in competition with a number of firms both in Canada and the United States. This immense job is just completed, and weighs between nineteen and twenty tons. The doors are fitted with four patent Burglar Proof Combination and one double Chronometer Time



Locks, and are perfectly impregnable and powder-proof. They have also lately shipped to Winnipeg similar Vault and Doors for the offices of the Assistant Receiver-General at that place, and have now ready to load, no less than five cars of safes, ordered by parties in the different towns of Manitoba.

Some idea of the extent of the works may be gleaned by giving their dimensions, which are as follows:—The main building is built of red brick, four stories high, 100 x 220 feet. At the rear of this are several accessory buildings, such as Foundry, Blacksmith Shop, Paint Shop, Filling Rooms, Furnace, Bending Room, Stables &c., which extend from the rear of main building a distance of nearly 200 feet. The cellars of the main building are stored with raw material, coal, &c., and there is also a boiler used for heating the building.

The ground floor is used principally as a show-room, and a handsome array of every description and size of Safes is in