hinged at the top, made to open outwards. All hardware must be wrought iron with a black flat finish; the guards must be wrought iron also (cast iron should never be use), the bars to be three inches, apart, threeeighths thick, two feet two inches high, with a slope to twelve inches, top and bottom rail composed of quarter-inch by two inch iron ; the mangers should be constructed of the non-wasting type, with the frame extending across the stall; the front of the manger may be built of planks; bridle brackets should be set about three feet six inches above the floor not closer than two feet eight; and harness racks seven feet four, Not closer than two feet apart. In the cow stable the stalls will be built entirely of wood four feet eleven in height with 8 feet 6 inches space for a cow from head of stall to gutter, having a width of three feet six ; the to gutter, having a width of the gutter; the animals may be secured by means of chains or stanchions, but if stanchions are used a little difference in length of stall must be made. These stalls are ventilated by windows so as to cause cross currents up the ventilation shaft. The calving stable is convenient to the main stable and has access to a sheltered yard ; the cows will stand facing the north, and a root cellar may be excavated beneath the main barn floor, or a silo may be built according to the location on the plan. It will be necessary that all grain bins should be lined with zinc ; the sheltered yard faces the south and has a covered shelter with poultry house opening into it the walls of which are to be double-sheathed, doublepapered and as tightly built as possible. The machinery barn has a plank floor with large sliding doors, and the entrance to the large barn must be at least fourteen feet wide and twelve feet high.

The plan of the separate stable could easily be adapted to city or country requirments, but in our

COMPARATIVE PERMANENCE OF BUILDING STONES.

In the Tenth Census, issued by the United States Government, the following table is given of the "life" of the various kinds of American building stones, by the term "life" being understood the number of years that the stones have been found to last without discolouration or disintegration to the extent of necessitating repairs :—

	THE IN TOTAL	
Coarse Brownstone	5 to 15	
Compact Brownstone	100 to 200	
Bluestone (sandstone) untried, probably		
Nova Scotia Sandstone, untried		
perhaps from one to many centuries		
Coarse Fossiliferous Limestone	20 to 40	
Fine Oolitic (French) Limestone	30 to 40	
Marble, coarse, Dolomitic	60 to 80	
Marble fine	50 to 100	
Granite	75 to 200	
Gneiss, fifty years to many centuries	Puilding News	
	manner ive ave ave	

METALLIC FURNITURE.

"Incombustible furnishings have a well-defined place in the scheme for producing a really fireproof building, and without them such a structure will never be entirely attained. The correct use of metallic furniture is postulated on a clearly defined theory, and that is a properly prepared place in which to use it. In short, utilized to its fullest extent, it is employed less as a protection against fire than as a means of preventing fire. 'No starting point for fire' was the basic conception of its use, and that is the idea underlying its widest employment to-day. Metallic fittings should not be so used as to be exposed to hazards that properly should be met by structural conditions. The product is distinctly fire-resisting rather than fireproof, a fact that should be kept clearly in mind in planning for its employment. That it does possess the quality of individual protection to a large degree is abundantly witnessed by the re-



limited space it is impossible to give all details, but we think we have enumerated the chief points. A great difficulty in planning stables, suitable to meet the conditions of such a rigorous climate, is the overcoming of the sweating of the walls, especially in brick or stone stables. This of course can be overgiving careful attention to the ventilation.

The Milton pressed Brick Company have been granted their capital stock to \$250,000. This will enable them to largely in Canada peated instances of security afforded by it under severe tests. Its true function, however, as stated, is the complete elimination of interior fire hazards. Speaking broadly, its possibilities in this direction have as yet been little appreciated, notwithstanding the constantly increasing demand for it. As a whole, architects have made but little study of the problem of reducing interior fire hazards."

There are practically no limitations on metallic furniture and fittings for public buildings, office buildings, banks, private offices, etc. Furniture of every variety and interior fittings are produced in sheet metal from architects' designs. Metallic furniture will stand hard usage, requires no repairs, is attractive and it resists fire.—Insurance Engineering.