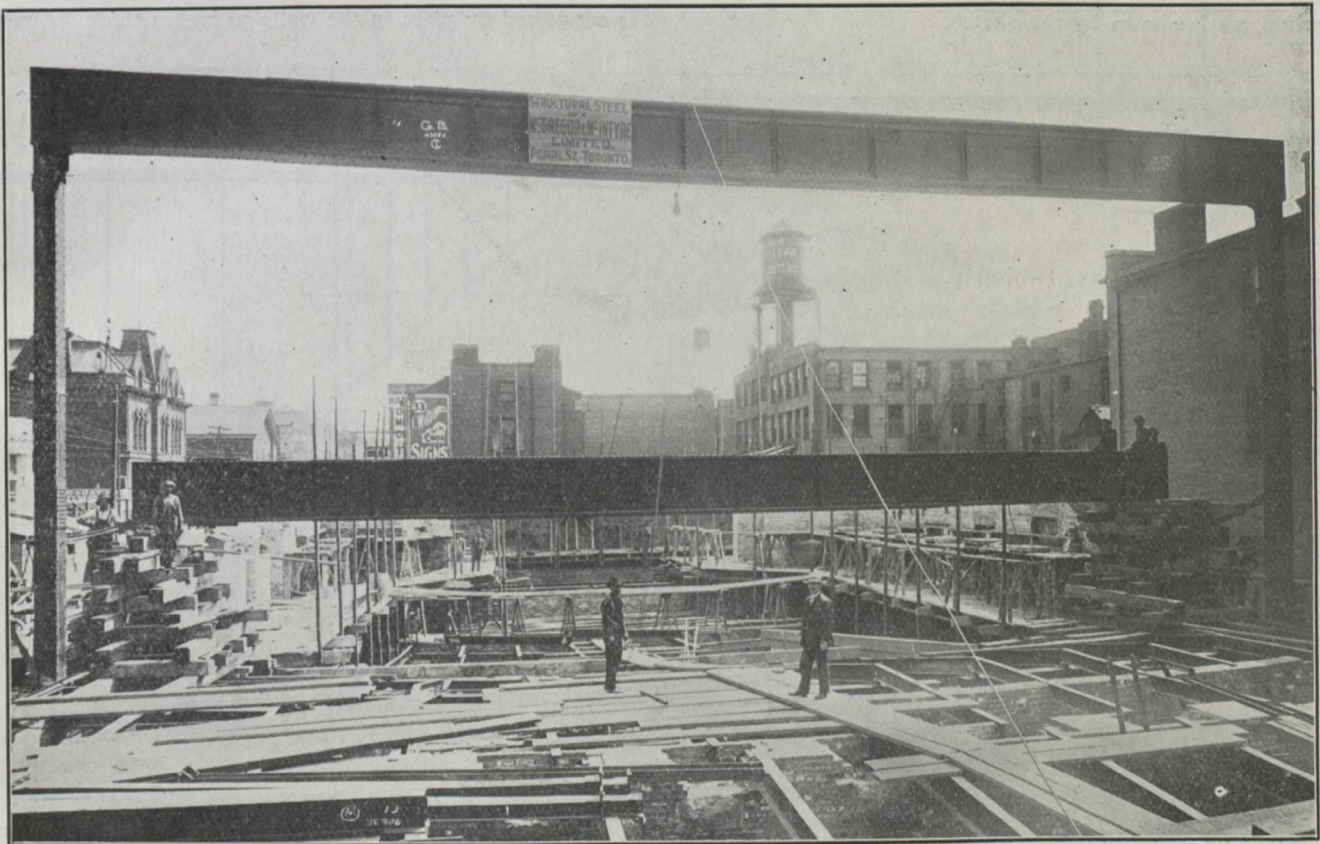


follows: Auditorium, 85 dead and 125 live load per square foot; stage, 50 dead and 250 live load; lower mezzanine, 90 dead and 100 live load; balcony, 85 dead and 125 live load; upper mezzanine, 8 dead and 100 live load; gallery, 85 dead and 125 live load; ceiling, 20 dead only; stage ceiling, 50 dead and 100 live load; roof, 45 dead and 60 live load. All partitions are either of brick or of steel lath and studding, and all plaster, much of which is cast and very heavy, is fastened on expanded metal or more solid steel. The several parts of the building being necessarily so different in construction, we will now proceed to take up the building more in detail.

**Walls.**—These vary in thickness from 31-inch in the basement to 18-inch in the hollows of the false arches, just below the roof. The foundations are of concrete 51-inch by

each side for the use of the gallery only, the balcony audience entering by the auditorium. Omitting the stair wells at the sides, the lobbies are some 50 feet by 20 feet, with some deductions for toilet rooms. The floors are of hardwood, resting on 4-inch concrete slab, reinforced with No. 10 expanded metal, the slabs being carried by 12-inch at 40 I-beams, spaced 7 feet apart, and resting on front and auditorium walls.

**Auditorium.**—This is some 74 feet in width by 99 feet in depth with a height of sixty feet. The rear wall is curved to a radius of about 140 feet. The floor itself is level only at the entrance, where it is less than two feet above the street, thence it drops sharply at a decreasing bevel, the remaining distance being divided into five segments of 15 ft., with drops of 3 feet, 2½ feet, 2 feet, 1 foot, and 0 feet, respectively.



Balcony and Gallery Girders as Erected.

20-inch deep, and are carried down about fifteen feet. As the soil is a very firm blue clay it was only necessary to carry them down clear of the basement floor slab. For architectural purposes, a handsome red pressed brick was used, the common Toronto yellow brick being used elsewhere, a total of nearly 18,000,000 being required. Owing to the large area of the walls it was possible to somewhat systematize the laying of these. The scaffolding entailed labor as the sloping floors were of little assistance and it was necessary to carry the falsework immediately adjacent to the walls to the base of the trusses, nearly sixty feet up. Two hoists, one at each end of the building, were used, and one gang devoted their entire time to the shifting of scaffolding, enabling thirty or more masons to continue at work without loss of time.

**Front Lobbies.**—These are altogether five storeys in height, there being both a lower and an upper mezzanine, giving two storeys of lounging rooms available for both balcony and gallery. Six-foot iron stairways are located at

Each segment, like balcony and gallery, is part of a cone whose point of generation is at the rear wall of the stage, and whose height such as to give the proper slope. Like the lobbies, the floor will be surfaced with wood fastened to sleepers embedded in cinder concrete. Seven-foot centres and 4-inch slab are used throughout, the 12-inch I's resting on double 10-inch I's laid transversely, these again resting on brick piers. Owing to these piers and the great variation in height (12 feet down to 4 feet), the basement is useful only for storage and heating purposes, the positive heating fans being installed here. Access is obtained from here to a smoking room under the entrance, making in all five lounging rooms.

**Balcony.**—It is here that the more specialized construction becomes evident. With the exception of a small level passage at the rear the whole balcony is a cone, sloping at a bevel of 4½ inches per foot. The balcony is some 74 feet from wall to wall and 47 feet deep. Below it, 12 feet from the