Practical Trial and Tests.—In all the above work there has never been a single case of failure or accident, under long continued usage for road travel or extremely severe trial tests. The 4-200 foot Arch spans built by us for common highway traffic, at Parker, Pa., have been satisfactorily used for the past five years as a Narrow Gauge Railroad Bridge, by the Parker & Karna City Railway. The 115 foot span built for the B. C. R. & N. E. W., at Vinton, Iowa, on our regular Highway Truss plan, has given perfect satisfaction. The 149 foot span built at Atlanta, Ga., was tested by a dead load of over 100 tons of stone, in connection with a moving load of over 100 tons of green lumber drawn over on wagons; and the 155 foot spans built at Northampton, Mass., were loaded with 122 tons of sand per span, without the least perceptible injurious effect.

General and Special Plans.—We give on the following pages a few examples of our general plans of Truss and Arch Bridges; some one of these designs will be found suitable for nearly all locations. We give special attention to the subject of Special Designs, which can often be used in particular locations instead of the ordinary standard plans of construction, with a material saving in cost, and advise parties to consult us as to general plan of work before deciding on spans or substructure, as we can often reduce the whole cost.

In such cases parties will oblige us by sending plan and profile of bridge site, showing the character of river bed, depth of water, and height of extreme high water, and skew of bridge if not square with the streams, together with a general statement as to the requirements of travel; whether located in or near a town or city, distance from nearest railway station; kind and probable cost of lumber for joists and flooring; width of roadway; number and width of footways, if any, and the capacity per square foot of floor surface, or per linear foot of bridge, if any has been decided upon.

Purchasers of Bridges, who have any option, will find it somewhat to their advantage to place contracts so that shop work may be done in the winter or spring, and the bridges erected early in the season, as then the rolling mills, the railroads and our own shops are most slack of work, and lower prices can be obtained.