

(8) Ornamentation should be employed only as an aid to the display of general lines and proportions.

(9) Public appreciation of the work will be largely affected by the character of the surface finish.

(10) Neatness of the surroundings and approaches are indispensable to a pleasing appearance.

(1) CONFORMITY WITH PHYSICAL CONDITIONS AND SUITABILITY FOR THE WORK.

A more fundamental requisite for an artistic bridge cannot be stated than that it should be appropriate to its surroundings and exactly suitable for the service which it has to perform. Thus, to illustrate, while the beautiful Alexander III. Bridge already mentioned (Fig. 3), with its noticeable vertical curvature and elaborate decoration, is suitable for its setting and traffic, it would be altogether inappropriate for a railroad bridge in a dingy manufacturing town. For such a situation as the latter nothing could be more fitting than a structure of the type of the Rankin Bridge (Fig. 4), which carries a hot-metal route over the Monongahela River, Pittsburgh, between Carrie Furnaces and the Homestead Iron Works. Every line of the great bridge suggests strength, simplicity, and capacity to perform enormous work with ease. The complete absence of everything which could be construed as ornamentation conveys the correct impression to the observer, that it is simply a magnificent device to facilitate the transportation of vast loads through an industrial centre.

In wild, rocky regions, with swiftly-flowing streams, bridges should be expressive of, and in harmony with, the rough, primitive conditions existing about them. Bold, powerful structures absolutely without ornamentation will alone do justice to such surroundings. Figure 5 illustrates a solution of a typical problem of this character. This span bridges Rock Creek, a rapid, stone-strewn stream in the National Park, Washington, D.C., and the existing local conditions were admirably expressed, as will be seen, by the use of a boulder-faced arch.

Where the landscape becomes thinly-wooded, more regular, and perhaps carefully kept, more graceful structures, with evidences of greater finish, should be adopted. Such a one, shown in Fig. 6, crosses Rock Creek in the National Park, Washington, D.C., already referred to, at a point where its usual wildness is succeeded by regular, grass-covered banks bordering a well-kept, gracefully-curving drive. The pebble-dash finish, with the cobble-stone belt course in the parapet, was adopted as suggestive of the gravelly bed of the stream at this point. Fig. 7 illustrates the manner in which similar