The execution of this plan is not impossible: for it might be accomplished in the following manner. First trace out, on a large wall, a plan of the projected Bridge. By describing two concentric arcs at such a distance from each other as the length of the pieces of timber to be employed will admit, which we shall suppose, for example, to be ten feet, giving them the form of an arc of ninety degrees from one pier to another: then divide this arc into a certain number of equal parts, in such a manner, that the arc of each shall not exceed five or six feet.

On the supposition here made, of the distance of one hundred feet between the two piers, an arc of ninety degrees which covers it would be one hundred and ten feet in length, and its radius would be seventy feet. Divide, then, this arc into twenty-two equal parts, of five feet each, and with the above pieces of timber, joined together, from a kind of voussoir eight or ten feet in height, five feet in breadth at the intrados, and five feet eight inches six lines at the extrados; for such are the proportions of these arcs, according to the above dimensions. Fig. 20 represents one of these vous-