

*A Letter from Mr. Tankred Robinson to Dr. M. L.
Aug. 4. 1683. concerning the Bridge at St. Esprit
in France.*

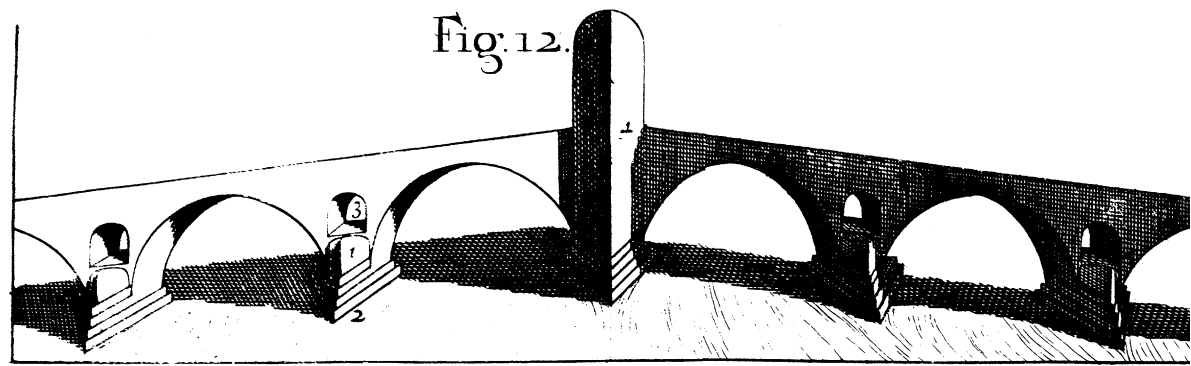
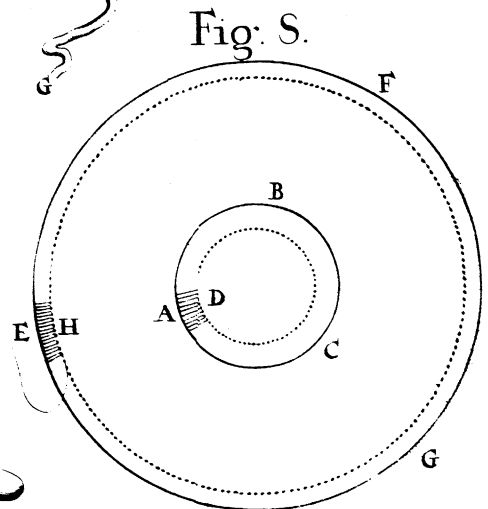
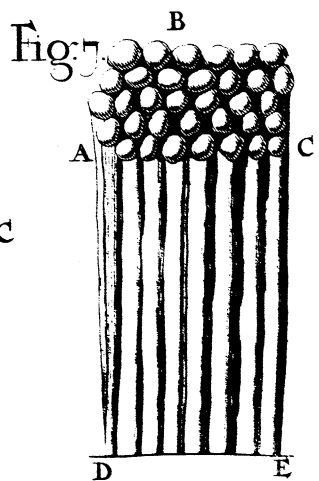
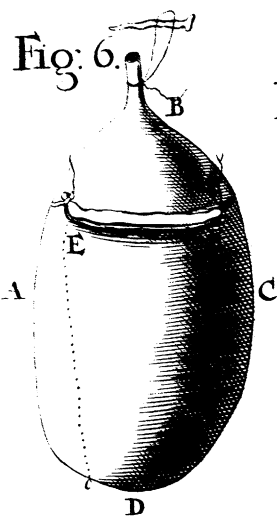
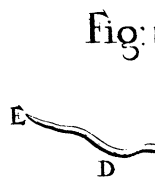
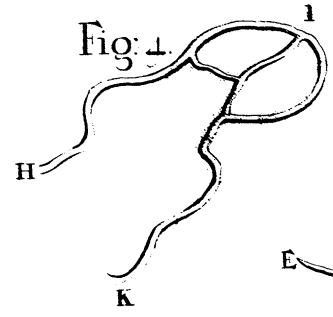
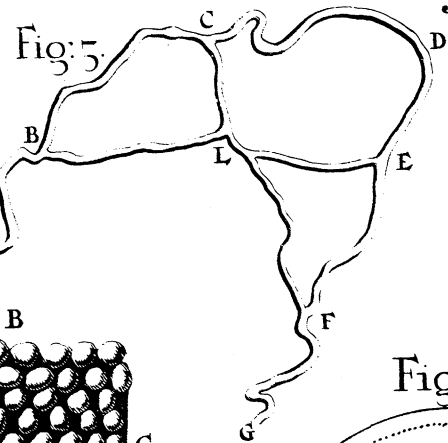
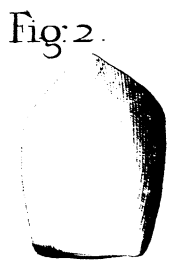
According to your Order, I made as many Observations upon the Fabrick, and design of the Bridge at *Pont St. Esprit*, as my short stay there would permit; I sent you a Draught and Description, drawn hastily upon the place, peradventure you can make nothing of them, unless assisted by your own Memory.

This famous *Roman* Bridge at *Pont St. Esprit* is very crooked, bowing in many places, and making several unequal Angles, especially in those places, where the Torrent runs strongest, as where the Turret stands *F. 12. N. 4.* In which place the Angle is most unequal, and the greatest; the Arches are very wide, and have their feet secured by two Pedestals that encompass them. Both these Pedestals have their several degrees, or Ranks of jettings out, like so many rows of stairs or steps, the lowermost order pushing out most, the others being less, and going gradually more in; the second or uppermost Pedestal is much less than the first, or lowermost, being built a little within its lines of circumference, see *N. 1, 2.* between the great Arches there are windows, or (as it were) small Arches, *N. 3.* that come down to the very plane of the second, or uppermost Pedestal, dividing the feet of the great Arches. From this my rude Description it appears to me, that the *Romans* have here contriv'd all possible ways to break gradually the mighty force of the Rhosne, and to render its passage easy, and inoffensive to the feet of the great Arches; for here we see so many several Palisadoes and Sluces, as may be sufficient to defend this wonderful Fabrick against all storms of the Torrent; The several ranks of stairs jetting from the Pedestals
(for

(for the most part triangularly built, and fac'd well with free-stone) opposing, and breaking the stream severally, I mean, not altogether, or at the same time, by reason of their various inequalities in standing out: in case the flood should swell so high (as it frequently does) as to cover both the Pedestals, then the small Arches dividing the feet of the great ones N. 3. help to convey the water through, which otherwise might endanger the great Arches. This Sir, is all I conceive at present, I mean as to the superficial design, whether there is any particular Architecture within the Pedestals, or at the feet of the Arches within them, or in the general fabric of the Bridge it self, I cannot tell; no body being able to inform me: or whether the *Romans* had some peculiar Cements not known to us.

A Remark about the foregoing Letter by Dr. M. L.

Note that what seems the foot of the Arch, is an *Horizontal Arch* gradually contracted, every stone being of vast length and wedge like, laid level with the water. This I speak by memory, and in this particular I did most desire to be satisfied, because it might be of great use and advantage in building our Bridges in *Yorkshire*, whose streams are mostly Torrents, as the *Rhosne* is the greatest in *Christendome*, and ours mostly as that have rocky bottoms, which will not admit of Piles driving in.



M. Burghers sculp.

ct. Number, 160.

